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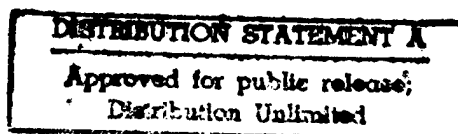
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**Final Environmental Baseline Survey
CERFA Report
Sierra Army Depot Reuse Parcels
Lassen County, California**

Prepared by:

Harding Lawson Associates

March 1997



**Prepared for:
U.S. Army Environmental Center
Aberdeen Proving Ground, MD 21010-5401**

**Contract No. DACA 31-94-D-0069
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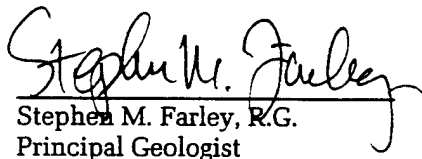
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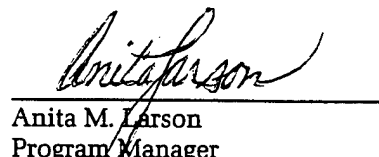
**Final
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CERFA Report
Sierra Army Depot, Lassen County, California**

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- B HONEY LAKE REUSE PARCEL EBS AND CERFA REPORT
- C SOUTHWEST CORNER REUSE PARCEL EBS AND CERFA REPORT

SELECTED ACRONYMS

ACM	Asbestos-Containing Materials
ARRP	Army Radon Reduction Program
Army	U.S. Department of the Army
ASR	Archives Search Report
BCP	BRAC Cleanup Plan
BCT	BRAC Cleanup Team
BEC	BRAC Environmental Coordinator
BRAC	Base Realignment and Closure
BTC	Base Transition Coordinator
CEQA	California Environmental Quality Act
CERFA	Community Environmental Response Facilitation Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)
COE	U.S. Army Corps of Engineers
CUC	Citizen's Utility Company
DERP-MIS	Defense Environmental Restoration Program - Management Inventory System
DoD	Department of Defense
DPW	Department of Public Works
EBS	Environmental Baseline Survey
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
EMD	Environmental Management Division
EPA	U.S. Environmental Protection Agency
EW	Explosive Waste
FOST	Finding of Suitability to Transfer
FOSL	Finding of Suitability to Lease
IRP	Installation Restoration Program

LBP	Lead-Based Paint
LMUD	Lassen Municipal Utility District
NEPA	National Environmental Policy Act
NPL	National Priorities List
NoAROD	No Action Record of Decision
OE	Ordnance and Explosives
PCBs	Polychlorinated Biphenyl's
RAB	Restoration Advisory Board
RAS	Risk Assessment Score
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROC	Record of Concurrence
ROD	Record of Decision
SIAD	Sierra Army Depot
SOC	Statement of Conditions
SPRR	Southern Pacific Railroad
SRE	Screening Risk Evaluation
SWMU	Solid Waste Management Unit
USAEC	U.S. Army Environmental Center
USAEDH	U.S. Army Corps of Engineers Huntsville Division
USAEHA	U.S. Army Environmental Hygiene Agency
UST/AST	Underground Storage Tank/Aboveground Storage Tank
UXO	Unexploded Ordnance

EXECUTIVE SUMMARY

This parcel-specific Environmental Baseline Survey (EBS) and Community Environmental Response Facilitation Act (CERFA) report presents the results of an assessment of the known existing environmental conditions for a portion of Sierra Army Depot (SIAD), Lassen County, California. The areas addressed in the main body of this report are known as the Herlong and Honey Lake Parcels. The areas discussed in the addenda to this report are known as the Airfield, East Shoreline, and Southwest Corner parcels. These three additional parcels were identified as excess Army property after the draft version of this report was completed. To expedite review, information about the three new parcels have been included as addenda to this EBS and CERFA report.

The purpose of the EBS is to support the transfer of real property by identifying available information about existing environmental conditions at a parcel and adjacent areas. The CERFA report, which has been included as Section 6.0, evaluates the environmental issues at the parcels and describes the environmental condition of the parcels according to one of the seven U.S. Department of Defense (DoD) categories. Once the environmental conditions of the parcels have been assessed, the Army can evaluate if one of the two conditions listed below have been met, indicating the parcels are acceptable for transfer:

- The requirements of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section (§) 120(h)(3) have been met for the parcel because all remedial action necessary to protect human health and the environment has been taken

or

- The requirements of CERCLA § 120(h)(4) have been met for the parcel because no CERCLA hazardous substances, petroleum products, or their derivatives were stored for 1 year or more, known to have been released, or disposed of on the parcel.

The EBS and CERFA reports are combined in this document to provide information regarding the environmental suitability of a parcel for transfer with respect to available information and specific criteria. This document is reviewed by the appropriate federal and state agencies, and agency staff comments are incorporated as necessary into subsequent versions of the document.

For the Herlong Parcel, the majority of the undeveloped area and part of the commercial area meets the criteria of DoD Category 1 and is available for transfer under CERCLA § 120(h)(4) as uncontaminated property. Smaller portions of the commercial area meet the criteria of DoD Category 2 because of the presence of petroleum hydrocarbon storage tanks and electrical transformers, some of which may contain oils with polychlorinated biphenyl's (PCBs). Based on recent changes to CERCLA in the DoD Authorization Act for Fiscal Year 1997, these areas of storage only are also available for transfer under CERCLA § 120(h)(4) as uncontaminated property. Because some of the USTs may have been the site of some release of hydrocarbons, some of the former and existing UST sites are categorized as DoD Category 3 and are available for transfer under CERCLA § 120(h)(3). Some of the buildings within the Herlong Parcel are suspected of containing asbestos-containing materials (ACM) and lead-based paint (LBP). The condition of these structures and whether they contain ACM and LBP will be disclosed at the time of transfer.

The majority of the Honey Lake Parcel meets the criteria of DoD Category 1. The extreme eastern portion of Honey Lake, encompassing the former Honey Lake Demolition Range meets the criteria of DoD Category 7 because of the suspected presence of ordnance and explosives (OE) on that portion of the parcel.

1.0 INTRODUCTION

This parcel-specific Environmental Baseline Survey (EBS) and Community Environmental Response Facilitation Act (CERFA) report presents the results of an assessment of known existing environmental conditions for a portion of Sierra Army Depot (SIAD), Lassen County, California (Plate 1). The areas examined in this EBS are the Herlong and Honey Lake Reuse Parcels (SIAD Reuse Parcels), as shown on Plates 2 and 3. Information presented in this EBS will be used to identify uncontaminated real property within the SIAD Reuse Parcels and to support transfer of the property to non-Department of Defense (DoD) use.

Honey Lake was acquired by the Army Air Corps in 1933 for use as an aerial bombing and gunnery range. In 1942, Sierra Ordnance Depot began operations as a reserve storage and supply depot for inert materials belonging to the U.S. Department of the Treasury. The Sierra Ordnance Depot was redesignated as the SIAD in 1962 because of the reorganization of the Army's Logistical Support Command under the Army Material Command (HLA, 1994).

During the 1940s, the Army Air Corps ceased its activities at Honey Lake; however, parts of the lake bed were used by the Sierra Ordnance Depot during the 1940s and 1950s as a demolition and function test range. Upon completion of the extensive Igloo Storage Area, the Sierra Ordnance Depot mission expanded to include storage of ammunition and explosives. In 1954, the function of receiving, storing, and issuing guided missiles and propellant fuels was added. During the Vietnam War, SIAD was also used as a vehicle maintenance facility (HLA, 1994).

The work force and activity at SIAD fluctuated with the involvement of the United States in military conflicts. Work force peaks were noted during the Korean Conflict and Vietnam War. After the Vietnam War, the civilian work force was reduced when large-scale vehicle maintenance activities ceased.

The present mission of SIAD is the receipt, storage, issue and maintenance of equipment and components for operational and project stocks; and demilitarization of conventional ammunition. To fulfill this mission, SIAD has a current population of approximately 695 personnel, including soldiers and their families. On February 28, 1995, the Secretary of Defense submitted a recommendation to Congress that SIAD be selected for major realignment under Public Laws 100-526 and 101-510. In July of 1995, Congress and the President finalized the 1995 Base Realignment and Closure (BRAC 95) list of base closures and realignments. SIAD, as part of the BRAC 95 realignment, is undergoing transformation of missions and anticipates releasing property for reuse in accordance with applicable requirements, including those of CERFA. The SIAD parcels identified for reuse under BRAC 95 are Honey Lake and an estimated 540 acres in the southwestern section of the main depot (Herlong Parcel).

1.1 Purpose and Objectives

Under current DoD and Army procedures, the Army has performed the following steps to evaluate the environmental conditions on excess property associated with base closures: (1) review currently available information about environmental conditions on the property, (2) prepare an EBS identifying uncontaminated property, and (3) identify that the property is suitable for transfer in terms of specific criteria. As stated in the most recent DoD guidance, the EBS program has the following objectives:

- Protecting human health and the environment
- Preparing EBSs in a manner consistent with assessing and documenting the environmental suitability of properties for transfer
- Ensuring transfer of property without interfering with cleanup actions

- Ensuring compliance with applicable environmental requirements, allowing DoD to demonstrate compliance with Comprehensive Environmental Response, Compensation, and Liabilities Act (CERCLA) § 120(h) before property is transferred
- Providing for adequate public and regulatory participation without unduly encumbering the DoD's authority and mandate to make property available for reuse in a timely manner
- Providing sufficient environmental review of the real property being considered for transfer in terms of avoiding unwarranted risks of future liability.

DoD and Army policy on the preparation of an EBS, including the specific criteria to be used by the Army in assessing the suitability of a parcel for transfer, is presented in the most recent DoD guidance on the EBS process, released June 1, 1994 (*DoD, 1994*), and Army implementing guidance dated November 10, 1994 (*Army, 1994b*). This EBS was prepared on the basis of these most recent guidance documents. The DoD Authorization Act of 1997 contained changes to CERCLA affecting property transfers. However, implementing guidance was not final at the time this report was issued and no changes to the property categorization definitions were made for this document.

The purpose of the EBS is to support the transfer of real property by deed or lease by providing an assessment of existing environmental conditions on a parcel and in adjacent areas on the basis of pre-existing information. To the extent that information is available, the EBS discusses the following:

- Status of site investigations
- Nature and extent of known contamination, if any
- Solid and hazardous waste management practices
- Underground storage tank (UST) management practices
- Status of building surveys for asbestos, lead-based paint (LBP), or radon
- Other information pertaining to environmental conditions on the parcel.

The EBS focuses on identifying and documenting environmental site characterization activities and the presence or likely presence of hazardous substances or hazardous wastes on a portion of real property considered for transfer. The EBS addresses hazardous substances or wastes, including certain substances not usually regulated under CERCLA and other substances such as petroleum products, asbestos, and LBP in structures. The EBS includes a consideration of soil or groundwater contamination and a description of potential public health and safety issues, such as those associated with the condition of buildings, that may affect the Army's ability or decision to transfer such property, to the extent that relevant information is available. The EBS may be updated to reflect more recently acquired information or to support transfer of additional areas.

1.2 Procedures for Conducting an Environmental Baseline Survey

The EBS is similar to a CERCLA Preliminary Assessment (PA) and may include information from many sources, including ongoing programs, such as SIAD's Installation Restoration Program (IRP), building surveys for asbestos, LBP, and radon, solid waste management activities, and other programs. Specific activities in conducting an EBS may include the following:

- Identification of parcel boundaries
- Search and review of existing records regarding environmental conditions on the parcel
- Description of known current or past activities on the parcel
- Interviews with current and/or former employees involved in operations on the parcel

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- Description of known hazardous substance or hazardous waste management practices on the parcel or an adjacent property
- Documentation of observations made during visual and physical inspections
- Description of possible sources of contaminants on the parcel or on adjacent parcels, on the basis of available information
- Documentation of ongoing response actions.

1.3 Summary

The EBS is a document that provides information regarding the environmental suitability of a parcel for transfer with respect to available information and specific criteria. The EBS also provides a mechanism for documenting known CERCLA and non-CERCLA information (e.g., possible health-related conditions associated with the presence of non-CERCLA asbestos-containing materials [ACM]).

1.4 Report Organization

The remaining sections of this EBS describe environmental conditions relevant to transfer of the SIAD Reuse Parcels. Section 2.0 describes the SIAD setting and the general characteristics of the SIAD Reuse Parcels, including parcel locations and boundaries, current and historical land uses, anticipated land use following transfer, and land use adjacent to the SIAD Reuse Parcels. Section 3.0 describes the specific activities conducted in preparing this EBS. Section 4.0 presents the results of the EBS, describing available information about existing environmental conditions on the SIAD Reuse Parcels. Section 5.0 summarizes the findings and conclusions of the EBS. Section 6.0 presents the CERFA report, which summarizes the environmental condition of the SIAD Reuse Parcels according to the seven CERFA categories. Section 7.0 lists references used in the preparation of this report.

Three addenda are included in this report. These addenda present the results of an EBS for the three new parcels that were identified for transfer after the draft EBS and CERFA but prior to the draft final reports were issued for agency review. These three new parcels are:

- Airfield Reuse Parcel (Addendum A)
- East Shoreline Reuse Parcel (Addendum B)
- Southwest Corner Reuse Parcel (Addendum C)

1.5 Limitations

This document was prepared for the sole use of HLA's client, the U.S. Army Environmental Center (USAEC), Aberdeen Proving Ground for the U.S. Army, the intended beneficiary of our work, to support transfer of the SIAD Reuse Parcels as required by CERCLA 102H(4). No other party should utilize the information contained herein without the prior written consent of HLA.

Although the EBS is a publicly available document, its distribution to other parties does not constitute HLA's consent for those or other parties to rely on the information contained herein. This document may not contain sufficient information for the purposes of other parties.

HLA's professional services for this EBS, including the preparation of this document, were conducted in accordance with practices and procedures generally accepted in the environmental consulting field in northern California at this time; no other warranty is given or implied by this report. This EBS was prepared in accordance with CERCLA 120H(4), the DoD BRAC Cleanup Plan Guidebook, and other applicable guidance documents.

Information about the presence or absence of hazardous substances in the area discussed in this report is based on limited data and observations. Environmental conditions may change over time and may be

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different away from locations where data or samples were collected or observations made. HLA does not and cannot have complete knowledge of environmental conditions in the area discussed.

Furthermore, this report is complete and accurate only to the extent that cited reports and available information are complete and correct and to the extent that all relevant information has been provided to HLA. The purpose of the EBS is to identify and describe available information. In the EBS, HLA has not attempted to independently verify the completeness or accuracy of the information presented except where noted or to independently assess the environmental condition of the described area.

2.0 PARCEL DESCRIPTION

This section presents relevant descriptive information about the SIAD Reuse Parcels, including an overview of SIAD's physical setting, proposed parcel reuse, previous and current activities on the parcels, and historical uses of adjacent parcels.

2.1 Sierra Army Depot Physical Setting

The SIAD is located in northeast California, about 4 miles from the California-Nevada state border near U.S. Route 395 (Plate 1). This 37,060-acre facility is comprised of two areas, the Main Depot and the Upper Burning Ground, in Honey Lake Valley of Lassen County. The topography of Honey Lake Valley is presented on the Milford, Doyle, Wendel, and Litchfield 15-minute series topographic quadrangles of the U.S. Geological Survey (USGS) (USGS, 1988a, b, c, and d). The Main Depot, which covers approximately 33,163 acres, borders Honey Lake on its western side and is adjacent to the Southern Pacific and Western Pacific railroads on its northern and southern boundaries, respectively. The eastern boundary generally runs parallel to the California-Nevada state border. The Herlong Parcel is in the southwestern section of the Main Depot. The Upper Burning Ground is a 3,897-acre rectangular parcel of land that lies immediately northeast of the Main Depot (Argonne, 1988).

Honey Lake covers approximately 60,108 acres (95 square miles) and occupies the lower part of Honey Lake Valley west of the Main Depot (Argonne, 1988). Honey Lake is included in the SIAD boundary.

Few towns exist in the area. A civilian and military community of a few hundred people resides near the southern entrance to the main depot in Herlong and Sage Flats. About 8 miles south of the SIAD is the town of Doyle, which also has a population of a few hundred people. Several hamlets dot the valley floor, each containing a few domestic dwellings (Argonne, 1988).

Current and past operations at SIAD are as follows:

- Routine maintenance of depot equipment and vehicles
- Maintenance and renovation of munitions
- Demilitarization of munitions
- Disassembly and repair of weapons
- Possible aerial bombing and gunnery practice.

Specific work practices involved with these operations include the following:

- Spray painting
- Welding and soldering
- Degreasing
- Lubricating
- Explosive washout and destruction in popping furnaces
- Grinding and machining
- Abrasive blasting
- Explosive detonation and burning.

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2.2 Physiography at Sierra Army Depot

The Honey Lake Valley is located in the Basin and Range physiographic province, an area characterized by northwest-trending, block-faulted mountains and valleys. The valley is bordered by the Shaffer and Antelope mountains to the north, the Skedaddle and Amedee mountains to the northeast, the Fort Sage and Virginia mountains to the southeast, and the Diamond Mountains to the south and southwest (Plate 1).

The Main Depot is adjacent to the eastern side of Honey Lake, which is a large, relatively shallow basin. The Main Depot's surface elevation varies from approximately 4,000 to 4,130 feet above mean sea level, showing little topographic relief. In contrast, the Upper Burning Ground is located on the southeastern flank of the Amedee Mountains, with a surface elevation that varies from approximately 4,040 to 5,480 feet above mean sea level (USATHAMA, 1979).

2.3 Meteorology at Sierra Army Depot

Honey Lake Valley has an arid climate characterized by low relative humidity and low precipitation. The average summer temperature is approximately 68 degrees Fahrenheit (°F), and the average winter temperature is approximately 35°F (JMM and ECJ, 1991).

The annual mean precipitation at SIAD is 5.6 inches, with approximately half of the precipitation occurring as snow during the winter (USATHAMA, 1979). The annual mean precipitation in the mountains surrounding SIAD is approximately four times the amount on the valley floor (ESE, 1983).

The prevailing wind direction ranges from the south to the northwest with an average wind speed of approximately 6 miles per hour (USATHAMA, 1979).

2.4 Surface Water at Sierra Army Depot

Surface water in Honey Lake Valley consists primarily of Honey Lake and several smaller lakes and reservoirs. The most prominent surface-water feature in Honey Lake Valley is Honey Lake. Honey Lake is a shallow basin that fluctuates greatly in area and volume in response to recharge from precipitation and runoff. On average, Honey Lake has a surface area of approximately 73 square miles (Handman et al., 1990). Main surface drainages from the surrounding mountain ranges include the Susan River to the northwest, Baxter Creek to the northeast, and Long Valley Creek to the southeast of SIAD (Benioff et al., 1988). These streams and rivers, excluding the Susan River, are considered ephemeral. The Honey Lake Valley appears to be isolated because no surface water flows from the valley. The USGS topographic quadrangle maps containing SIAD indicate that no defined surface drainage crosses the Main Depot. Occasional springs and surface water seeps are evident on area topographic maps (USGS, 1988a, b, c, and d). Water from Amedee Hot Springs reportedly forms a permanent wetland of about 200 acres northwest of the Main Depot on the northeast side of Honey Lake (Colberg, 1992).

2.5 Geology at Sierra Army Depot

The geologic history of the Honey Lake Valley is characterized by Tertiary block-faulting, volcanism, and basin-fill sedimentation. A major regional structural feature of probable mid-Miocene origin known as the Walker Lake fault system extends into Honey Lake Valley from the southeast. This fault system exerted primary control on the Tertiary basin-fill sedimentation in the Honey Lake Valley and the development of its present topographic features.

Granitic rocks of late Mesozoic origin are in the Diamond Mountains south of SIAD and are believed to lie beneath the basin-fill Tertiary sedimentary deposits and volcanic rocks (Handman et al., 1990). Miocene- and Pleistocene-age volcanic rocks overlie the granitic basement in the eastern and northern mountain ranges of the Honey Lake Valley. The basin-fill sequence of Honey Lake Valley is composed of Pliocene- to Holocene-age unconsolidated and semiconsolidated sediment and pyroclastic rock.

The basin-fill deposits beneath SIAD consist of unconsolidated and semiconsolidated lacustrine and fluvial deposits of clay, silt, sand, and gravel. The distal lake sediments and proximal alluvial fan deposits are characterized by a transgressive-regressive migrating shoreface that resulted in an interfingering of fine- and coarse-grained deposits in the sedimentary basin fill. This depositional environment displays rapid facies changes over short distances and probably resulted in the interbedding of Pliocene and Pleistocene basalts and pyroclastics.

During recent environmental studies, numerous soil borings have been drilled and monitoring wells have been installed throughout the Main Depot. Lithologic logs for these borings indicate that the northern half of the Main Depot is underlain predominantly by clays and silts with thin sand interbeds to a depth of 250 feet bgs (*JMM and ECJ, 1991*). The southern half of SIAD is underlain predominately by sand in this interval, with occasional thin interbeds of clay and silt (*HLA, 1994*).

2.6 Hydrogeology at Sierra Army Depot

The relatively thick, unconsolidated and semiconsolidated Pliocene to Pleistocene basin-fill deposits provide the principal water-bearing formations in the Honey Lake Valley. Beneath SIAD, the water-bearing zones encountered in monitoring wells and Potable Supply Wells are interpreted to consist of Lahontan Lake deposits. Recharge to the basin-fill deposits originates primarily as infiltration of precipitation in upland areas and infiltration of stream flow in alluvial fan areas (*Handman et al., 1990*). Discharge from aquifers within the basin-fill deposits is likely to occur at Honey Lake. Discharge also occurs from irrigation and water-supply wells in the valley (*HLA, 1994*).

The hydraulic conductivity of the unconsolidated sediment generally decreases with decreasing elevation. The median hydraulic conductivity of the basin-fill deposits and volcanic rocks has been estimated to be approximately 8 feet per day (3×10^{-3} centimeters per second [cm/sec]) based on production tests of supply wells and descriptions of geologic materials that occur in the basin (*Handman et al., 1990*).

Depth to groundwater varies widely over the Main Depot and varies depending on meteorological conditions. The depth to water adjacent to Honey Lake has ranged from just below ground surface (bgs) to depths of greater than five feet bgs. Groundwater is approximately 120 feet bgs near the southern end of the Main Depot in the vicinity of the four Potable Supply Wells for SIAD.

Water-level data at SIAD from the spring of 1993 have been compiled and are presented in a water-table surface map (Plate 4). Plate 4 indicates that groundwater flow is generally to the north in the southern portion of the Main Depot and to the southwest and west in the northern portion of the Main Depot. A broad groundwater divide dominates the east-central portion of the Main Depot that separates westward-flowing groundwater from eastward-flowing groundwater. The western portion of the Main Depot is characterized by a relatively flat hydraulic gradient with westward groundwater flow. Regional water-level data indicate eastward groundwater flow in the central portion of Honey Lake Valley east of the Main Depot (*DWR, 1963; Handman et al., 1990*). Eastward groundwater flow is also evident in the southeast portion of the Main Depot (Plate 4).

Groundwater mounds are present at two locations in the southern portion of the Main Depot (Plate 4). These two groundwater mounds form a local groundwater divide from which groundwater flows north and south at the southern end of the Main Depot (*HLA, 1994*).

2.7 Proposed Reuse, Sierra Army Depot Reuse Parcels

The Herlong Parcel is about 540 acres of existing land uses that range from open space to housing and office buildings. The conceptual reuse of the Herlong Parcel (*Weis, 1995*) follows. The housing and chapel are under consideration for reuse as similar facilities. The office areas and administration buildings are under consideration for reuse as similar facilities, with the possibility of some administrative areas being converted to light industrial use. Open land parcels such as the tennis court, baseball diamond, and general undeveloped land areas are currently planned to remain open areas.

The light industrial areas may develop if a cooperative agreement on use of the SIAD Airfield is developed.

The conceptual reuse of the Honey Lake Parcel will most likely be public land as a wildlife refuge (Weis, 1995).

2.8 Sierra Army Depot Reuse Parcels Description

The two SIAD Reuse Parcels consist of approximately 60,648 acres with approximately 47 habitable buildings. The two areas are the Herlong Parcel and the Honey Lake Parcel. The Herlong Parcel covers approximately 540 acres at the southern edge of the Main Depot and is roughly bordered by Susanville Road to the north, Western Pacific railroad tracks to the south (the SIAD southern boundary), Nevada Street to the east, and the SIAD boundary to the west (Plate 2). Activities within the Herlong Parcel include housing, commerce, and recreation to support SIAD. Within the Herlong Parcel are three areas leased to the State of California that contain State-owned buildings used for public school and state administrative support, and one building owned by the Citizens Utility Company (CUC) used for a telephone exchange. The buildings are owned by the state and CUC, but the land is owned by the DoD (Gordon, 1995). The land but not the buildings are therefore considered part of the reuse parcel.

The Honey Lake Parcel covers approximately 60,108 acres. The entire lake is the reuse parcel. The lake is bordered on the north, northeast, south, and west by undeveloped land, with some ranches and farms near the communities of Wendel, Buntingville, and Milford. The southeast side of the lake is bordered by the main facility of SIAD (Plate 3). No habitable structures are within the Honey Lake Parcel.

2.9 Previous and Current Activities on Sierra Army Depot Reuse Parcels

The SIAD Reuse Parcels were formerly ranches, Bureau of Land Management (BLM) land, and State of California property. The ranches and State of California property were acquired by several Declarations of Taking by the DoD in the 1930s and 1940s. Concurrently, the BLM property was withdrawn from the Department of Interior (Gordon, 1995). Table 1 summarizes the various previous land owners of the Herlong and Honey Lake parcels.

Since the early 1940s, residential, commercial, and recreational activities have occurred at the Herlong Parcel in support of the SIAD mission. Table 2 summarizes existing, Army-owned buildings and their use for structures within the Herlong Parcel. In addition to Army-owned buildings on the Herlong Parcel, approximately 17 buildings owned by the State of California are also located on the parcel. These buildings are associated with two high schools and a primary school operated by the State of California. Another building owned by CUC is located on the Herlong Parcel near the intersection of Susanville Road and Flagler Boulevard. This building is reportedly used as a telephone exchange center.

Other Army-owned structures previously existed on the Herlong Parcel. These former housing and commercial areas, which were constructed in the 1940s, extend from the former Title 8 Housing Area east across the current Sierra Court and Lahontan Court Housing Areas to Nevada Street and north across the current commercial area to Susanville Road (Gordon, 1995). HLA reviewed a map from SIAD DPW (dated July 1952) illustrating building locations at that time (DPW, 1952). Former buildings illustrated on Plate 2 were interpreted by laying the current parcel map on top of the 1952 map, using Susanville Road, California Street, and the Western Pacific railroad tracks as control, and outlining the areas of former buildings on the current parcel map. Buildings in the former Title 8 Housing Area were demolished in 1992 (Riess, 1996a).

Before the 1940s, Honey Lake was used for recreational, agricultural, and commercial activities, including hunting and operation of a steam barge from Milford to Wendel that transported agricultural products (Colberg, 1995). The Honey Lake Parcel was possibly used by the DoD for aerial bombing training during the 1930s and 1940s (HLA, 1994). At the central part of the Honey Lake, at an area

called the former munitions demolition grounds, SIAD personnel detonated munitions during the 1940s and 1950s (*Colberg, 1995 and Weis, 1996b*). No activities are ongoing at the Honey Lake Parcel.

2.10 Previous and Current Activities on Property Adjacent to Sierra Army Depot Reuse Parcels

The area surrounding the SIAD Reuse Parcels consists of developed and undeveloped property. Adjacent to the northeast side of the Herlong Parcel are commercial facilities and the main SIAD facility. Adjacent to the south side is undeveloped BLM land, to the west is undeveloped land, residential, and commercial activities of the Patton Village community, and to the north is undeveloped land of the main facility. Ranching and farming formerly occurred in the area surrounding the Herlong Parcel (*Gordon, 1995*).

Land use surrounding the Honey Lake Parcel has always been ranching and farming. A geothermal power plant operates adjacent to the Honey Lake Parcel southeast of Wendel.

3.0 APPROACH TO CONDUCTING ENVIRONMENTAL BASELINE SURVEYS

This section describes the activities performed for the SIAD Reuse Parcels EBS. The procedures followed are described in EBS guidance (*DoD, 1994; Army, 1994b*). This EBS for the SIAD Reuse Parcels considers currently available information from various sources, including interviews with SIAD personnel, IRP investigations, UST investigations building inspections, and evaluations of the potential for adverse impacts from other parcels near the SIAD Reuse Parcels. Results of these investigations are in Section 4.0.

Environmental programs currently ongoing at SIAD include the Basewide IRP, the UST program, building surveys for ACM and LBP, management of PCB-containing transformers, evaluation of potential releases from solid waste management units (SWMUs), and an assessment for the presence of unexploded ordnance (UXO) and ordnance and explosives (OE). New information may be available in the future because some of the programs are ongoing. New information could change the assessment of suitability or the Army's decision to transfer portions of the SIAD Reuse Parcels.

3.1 Records Search

Existing reports and other available records, including federal government and state and local agency databases, have been reviewed to identify past or current activities relating to environmental conditions within and near the SIAD Reuse Parcels. Documents and information reviewed for this EBS include the following types of reports or investigative and management plans developed by SIAD as part of the IRP and BRAC programs:

- Remedial investigation/feasibility study (RI/FS) reports for SIAD
- Construction information for buildings within the SIAD Reuse Parcels from SIAD Department of Public Works (DPW) files
- Results of building surveys for asbestos, LBP, and radon programs from the SIAD Environmental Management Division (EMD)
- Inventories and management programs for aboveground storage tanks (ASTs), USTs, and SWMUs from the SIAD EMD
- Solid and hazardous waste management plans, including surveys of electrical transformers from the SIAD EMD
- Air monitoring reports/emissions inventories from the SIAD EMD
- Historical aerial photographs for UXO and OE from SIAD DPW
- Documentation of federal and state environmental database searches, including the U.S. Environmental Protection Agency National Priorities List (EPA NPL) and Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) databases and the list of California Superfund sites, which was obtained from Vista Environmental Information (Appendix A).

Documents identified by SIAD personnel provided information on hazardous materials and hazardous waste management procedures at SIAD. Relevant documents identified by SIAD personnel and reviewed for this EBS include the following:

- Periodic Site Review of the Sierra Army Depot Sanitary Landfill (*MCA, 1993*)
- Installation Spill Contingency Plan, Sierra Army Depot (*SIAD EMD, 1991a*)

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- Hazardous Waste Management/Toxic Materials Training Plan, Sierra Army Depot (SIAD EMD, 1991b)
- Spill Prevention Control and Countermeasure Plan, Sierra Army Depot (SIAD EMD, 1992)
- Hazardous Waste Minimization/Pollution Prevention Plan, Sierra Army Depot (SIAD EMD, 1995)
- Pest Management Plan, Environmental Assessment (Westec, 1995).

Other potentially relevant documents, including available tank tightness tests and site-specific spill reports, were also reviewed. No areas on the Herlong or Honey Lake parcels were identified in the spill reports, with the exception of three to four minor spills (3 to 5 gallons each) that occurred between 1987 and 1994.

Information from documents regarding hazardous materials and hazardous waste management is summarized in Section 4.8.

3.2 Interviews

SIAD personnel were interviewed as necessary to support the EBS. The Army identified a specific point of contact among the personnel for each of the environmental programs being conducted at SIAD (Table 3). As specifically noted in Section 4.0, these points of contact were consulted at various times to obtain updates of schedules and the status of assessment and abatement or remedial actions that were under way.

3.3 Visual Inspections

HLA personnel performed a site visit during October 1995 and March 1996 to review areas of potential environmental concern related to the use, storage, generation, or disposal of hazardous materials on the Herlong and Honey Lake Parcels. The locations of buildings and other features on the two parcels are shown on Plates 2 and 3. Observations of the parcels were made by walking and driving accessible areas of the properties.

Herlong Parcel

The Herlong parcel comprises community, retail, storage, and office buildings, Army barracks, housing units, an athletic field, and paved and unpaved areas of land (Plate 2). During the site visits, HLA personnel observed the interior and exterior of the non-residential buildings and representative housing units for the potential storage of hazardous materials. Small quantities of paint, bleach, cleaners, and other janitorial supplies were stored in closets of individual non-residential buildings. Interior finishes generally consisted of floor tile or linoleum, carpeting, ceiling tiles, sheetrock, and wood paneling. General housekeeping was orderly. Exterior surfaces of the non-residential buildings generally consisted of asbestos cement siding, stucco, and wood and were observed to be intact and in good condition.

The observed housing units were found to be in generally good condition, with only minor damage noted to miscellaneous interior and exterior surfaces. Interior finishes in the housing units observed during the site visit consisted of floor tile, linoleum, and sheetrock. Exterior surfaces consisted of stucco and wood siding. Housekeeping in and around the housing areas was neat and orderly. No visible evidence of hazardous material storage or releases was observed in either residential or non-residential buildings.

The remaining developed portions of the Herlong Parcel are well maintained and occupied by recreational areas, paved streets and parking lots, and landscaped areas with grass and trees. Graded land and open areas covered by native shrubs and sagebrush occupy undeveloped portions of the parcel. As noted in Section 2.8, three areas within the Herlong Parcel are leased to the State of California. These areas contain buildings used for public school and state administrative support. In addition, CUC owns one building located within the parcel that is used for a telephone exchange.

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No odors or air emission sources were noted during the site visits in October 1995 and March 1996. The results of the visual inspections for specific environmental issues are reported in appropriate portions of Section 4.0.

Honey Lake Parcel

HLA conducted a reconnaissance of the Honey Lake Parcel during October 1995, by driving the perimeter of the lake. The parcel consists of the entire lake and land areas near the shoreline (Plate 3). Land areas within the parcel are undeveloped and of low relief. The surface soils are sandy. Vegetation consists of sagebrush and other native low-growing shrubs and plants. No existing facilities are on the parcel.

No stressed vegetation, noticeable odors, or air emission sources were noted at the Honey Lake Parcel. No visible evidence of USTs, ASTs, or hazardous material releases were observed during the site visit.

3.4 Sampling

The EBS is typically prepared on the basis of available data and no separate sampling specifically associated with this EBS was conducted. However, according to DoD guidance, sampling of environmental media including soil, groundwater, or building materials is appropriate in the EBS to support decision-making. A number of sampling activities, including those associated with building surveys, UST investigations, and IRP, have been completed or are ongoing and were used in support of the EBS.

3.5 Identification of Potential Impacts from Adjoining Properties

Potential impacts from adjoining properties were identified on the basis of available land-use information associated with properties within approximately 1 mile of the SIAD Reuse Parcels boundary. The 1-mile search distance is consistent with the American Society for Testing and Materials (ASTM) standard for property transfer investigations. To evaluate potential impacts from adjoining properties within the 1-mile boundary, the boundaries of the SIAD Reuse Parcels were first located on a SIAD site map, which was prepared using a computer-aided design/drafting (CADD) program. The areas surrounding the SIAD Reuse Parcels were then searched for known or suspected locations of SIAD IRP sites, SWMUs, USTs, and other previously identified areas where potentially hazardous materials may have been stored, released, or disposed onpost. The evaluation considered the nature of the potentially contaminated medium and the likelihood for contamination in that medium to affect the SIAD Reuse Parcels. Groundwater flow directions were considered in identifying potential effects of groundwater contamination on the SIAD Reuse Parcels. Details of the potential impacts from adjoining properties are discussed in Section 4.10.

Additionally, a reconnaissance of the adjoining properties was completed by driving through these areas to identify land-uses that may include sources of potentially hazardous materials. For sites near the SIAD Reuse Parcels boundaries, potential impacts from immediately adjacent areas were also identified by reviewing environmental databases maintained by federal and state agencies, as noted above (*Vista*, 1995). Information from this assessment is presented in Section 4.10.

3.6 Installation Restoration Program

The IRP program at SIAD, managed by the USAEC (formerly the U.S. Army Toxic and Hazardous Materials Agency), began in October of 1987, before the signing of the Federal Facilities Agreement (FFA) in 1991. The FFA, signed by the Army and State of California outlined the investigations to be performed and provided a priority schedule for the 23 sites by assigning phases or Groups I, II, and III.

Information from the Group I, II, and III investigations was reviewed during development of the SIAD Reuse Parcels EBS. Information from other site investigation activities, including evaluation of potential soil contamination associated with USTs, was also included in the SIAD Reuse Parcels EBS, as appropriate.

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3.7 Department of Defense Environmental Conditions of Property

The seven property classifications defined by the DoD BRAC Cleanup Plan (BCP) Guidebook (fall 1993) were adopted for this EBS report (*DoD, 1993*). The DoD has recently published new guidance redefining the seven property classifications based on the changes to CERCLA contained in the DoD Authorization Act of 1997. However, because those changes were not final at the time this document was prepared, no changes to the categories were made here. Information regarding environmental issues summarized in Section 4.0 will be used to classify the SIAD Reuse Parcels according to the seven DoD Environmental Conditions of a property (Section 6.0) as described below.

- **Category 1 - Areas Where No Storage, Release, or Disposal Has Occurred**

Areas in which no storage, release, or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).
- **Category 2 - Areas Where Only Storage Has Occurred**

Areas in which only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred).
- **Category 3 - Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, but No Remedial Action Is Necessary**

Areas in which storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred but at concentrations that do not require a removal or remedial action.
- **Category 4 - Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, and All Remedial Actions Have Been Taken**

Areas in which storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken.
- **Category 5 - Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, and Action is Under way but Not Final**

Areas in which storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are under way, but all required remedial actions have not yet been taken.
- **Category 6 - Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, but Required Response Actions Have Not Been Taken**

Areas in which storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented.
- **Category 7 - Unevaluated Areas or Areas Requiring Additional Evaluation**

Areas that are unevaluated or require additional evaluation.

4.0 RESULTS OF ENVIRONMENTAL BASELINE SURVEY FOR SIAD REUSE PARCELS

The results of the EBS for the Herlong and Honey Lake parcels, including a discussion of potential impacts from adjoining properties, are presented below.

4.1 Asbestos Management Program

The descriptions of the asbestos management program and its status to date are based on the information that SIAD personnel made available to HLA. HLA did not perform asbestos surveying, sampling, or analysis as part of the EBS, nor did we perform assessment or evaluation of the precision, accuracy, or applicability of the methods or data presented herein.

The purpose of the asbestos management program at SIAD is to identify ACM in Army-controlled buildings, evaluate the ACM's friability, condition, and potential for damage, and implement response actions appropriate to the findings. Asbestos-related work at SIAD is performed in accordance with the following documents/guidelines (Colberg, 1995b):

- Department of the Army

Army Regulation (AR) 200-1, *Environmental Protection and Enhancement*

Chapter 10, "Asbestos Management Program"

May 23, 1990

To control asbestos and minimize environmental release and subsequent occupational and incidental exposure, Chapter 10 of AR 200-1 requires that the following objectives be met:

- Exclude ACM from procurements and uses where possible
- Handle, store, transport, and dispose of asbestos and perform asbestos-related work in accordance with applicable regulations
- Perform building surveys to maintain an inventory of ACM, assess the potential for exposure to asbestos, and implement operations and maintenance programs and management plans to minimize potential exposure to personnel
- Maintain a nonoccupational environment safe from asbestos exposure.

- Department of the Army

Memorandum, "Policy Guidance - Lead-Based Paint and Asbestos in Army Properties Affected by Base Realignment and Closure"

November 15, 1993

This memorandum provides Army policy guidance on identifying and eliminating LBP and asbestos hazards for properties affected by BRAC. The guidance requires the following:

- Compliance with all applicable regulations and coordination with regulators to ensure compliance
- Maintenance of minimum essential operations, maintenance, and repair standards to prevent deterioration of BRAC properties and to assure sufficient protection of human health and the environment

- Verification that asbestos surveys and assessments have been or will be performed for BRAC properties prior to disposal
- Removal of ACM from a BRAC property if:
 - Protection of human health requires removal, such as for damaged friable ACM
 - It is intended to be used as a school (K through 12) or child care facility
 - It is unsalable without removal or ACM removal prior to property sale is cost effective
 - It is intended by the Army for demolition prior to property disposal
- Friable or potentially friable asbestos that presents a health hazard and that has been stored or disposed of underground or elsewhere on the property that presents a health hazard will be properly disposed
- Final BRAC actions taken regarding asbestos will be dependent on the overall disposal plan and any reuse of the building
- If the Army is pressed for early release of vacant property, where it is known that the buyer intends to demolish the property or remove the asbestos before reoccupancy in accordance with applicable regulations, removal of threatening asbestos may not be required. Negotiations are necessary to ensure that the Army's liability is minimized. Notice and disclosure of any restrictions are required in the transfer language.

4.1.1 Summary of Program

An asbestos survey of approximately 184 buildings basewide performed by IT Corporation (IT) in 1988 found both friable and nonfriable ACM. ACM was found in tank, pipe, and boiler insulation, roofing materials, transite shingles, floor tile, linoleum, and associated mastics, and crawl-space debris in the buildings (IT, 1988).

4.1.2 Program Status and EBS Results

The following presents the asbestos management program as it relates to the reuse parcels.

4.1.2.1 Herlong Parcel

According to the IT report, each of the numbered Army-owned buildings within the Herlong Parcel has been surveyed and sampled for ACM, with the exception of Buildings 1101 through 1109, 1111 through 1120 (housing units constructed in 1976), and 1121 through 1160 (housing units constructed in 1987) in the Lahonton Court Housing Unit. Only Building 1110 within the Lahonton Court Housing Unit was surveyed. None of the buildings owned by the State of California or CUC were included in the asbestos survey. The property upon which the buildings owned by the State of California or CUC are located is owned by the Department of Army. Friable asbestos has been removed from the buildings located on the school property. No other hazardous materials, with the exception of small quantities (less than 5 gallons) of photo chemicals, household cleaners, etc., are present within the school buildings (Shipley, 1995). The CUC building does not contain any hazardous chemicals (CUC, 1996). Because the Lahontan Court housing units (Buildings 1110 through 1120) were reportedly of identical design, age, and materials of construction, IT assumed that ACM conditions in Building 1110 were representative of conditions in Buildings 1101 through 1109 and 1111 through 1120 (IT, 1988).

Results of the IT survey are summarized in Table 4 and Appendix B, which list buildings surveyed, whether friable and/or nonfriable ACM was identified, and, if ACM was found, the numerical risk assessment score (RAS) assigned to the material sampled. The RAS was developed through an algorithm that takes into account several factors, including, but not limited to, fiber characteristics, asbestos risk factors, and experience with certain exposure situations (IT, 1988). According to the IT

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report (IT, 1988), these factors were used as guide once to assist in estimating a level of exposure and what remedial action, if any, was required to contain asbestos exposures. On the basis of the RAS, recommendations were developed for management of ACM found to be present. Possible RAS values can range from 0 to 162, with the rating of 162 indicating the highest level of concern. For the buildings within the Herlong Parcel, RAS values ranged from 0 to 84, with typical values less than 10.

As of October 1995, according to Mr. Allen Vanderville, Engineering Technician with the SIAD DPW, friable ACM identified in the IT report has been removed from all the buildings surveyed on the Herlong Parcel, with the exception of Buildings 2067 and 2069, which contain ACM in pipe lagging in the crawlspaces (Vanderville, 1995). Ms. Carol Gordon, Real Property Specialist with SIAD DPW, indicated that detected friable ACM was also removed from Buildings 1101 through 1109 and 1111 through 1120 (Gordon, 1995). Nonfriable asbestos-containing flooring was also removed from Buildings 1101 through 1120. Friable ACM is unlikely to be present in Buildings 1121 through 1160 based upon the 1987 construction date of these buildings. However, non-friable ACM is assumed to be present in these buildings.

On the basis of a visual site inspection performed by HLA on March 21 and 22, 1996, and information from SIAD personnel (Vanderville, 1995), asbestos-cement shingle siding also exists on a number of buildings within the Herlong Parcel, including Buildings 1010, 1202, 1203, 1204, 1217, and 1223. The asbestos-cement shingle siding was visibly identified based on its physical appearance and texture. Nonfriable ACM, in the form of glues, caulking, and roofing material, may exist in all buildings on the Herlong Parcel because these materials may have been used in building construction.

According to Ms. Gordon, previous housing units and individual commercial buildings, except for structures in the Title 8 Housing Area, were demolished between 1959 and 1977 (Gordon, 1995). The Title 8 Housing Area, which was constructed in the 1950s, was demolished in 1992 (Gordon, 1995 and 1996a). The locations of these former housing areas and buildings are based on a review of the map of Irrigation Riser Locations from July 1952 (DPW, 1952) and on the basis of existing roads. Friable ACM was reportedly removed from the Title 8 Housing Area structures and Building T-1019 prior to their demolition (Gordon, 1996b). For other former buildings demolished prior to 1988, documentation are not available that indicates that suspect ACM was removed from the old buildings prior to demolition (Gordon, 1996b). Random soil sampling was conducted by Weiss Associates (WA) in August, 1996 in the vicinity of former structures located within the Herlong Parcel. The purpose of the sampling was to determine the potential presence of detectable concentration of ACM in soil near these former buildings. The locations of the former structures were determined by a review of the 1952 map referenced above. No samples were found to contain asbestos above laboratory detection limits. The WA report indicated that the surface soil investigation provided no evidence of the presence of ACM that would present a health risk at the site of the sample locations (WA, 1996a).

4.1.2.2 Honey Lake Parcel

No buildings or former buildings are known to exist on the Honey Lake Parcel (SIAD EMD, 1995), therefore, ACM is not suspected to be present on the Honey Lake Parcel.

4.2 Lead-Based Paint Management Program

The descriptions and status to date of the LBP management program are based on information that SIAD made available to HLA. HLA did not perform LBP surveying, testing, sampling, or analysis as part of this EBS, nor did we evaluate precision, accuracy, or applicability of the methods or data presented herein.

Although SIAD has no formal LBP management program, the purpose of isolated LBP testing is to identify and control LBP and lead-contaminated dust in target facilities and eliminate LBP hazards in BRAC properties in accordance with Title X of Public Law 102-550, Residential Lead-Based Paint Reduction Act of 1992. The act applies to buildings constructed prior to 1978, planned for disposal after January 1995, and intended to be used as residences. Target facilities are Army-owned or Army-leased facilities constructed before 1978 and used regularly by children 6 years old or younger or

by pregnant women as family housing, child development centers, family child care homes, schools, playgrounds, or similar facilities.

In 1978, the Consumer Products Safety Commission (CPSC) reduced the allowable lead concentration in residential paint to 0.06 percent (600 mg/kg). On the basis of this revised allowable lead concentration, painted structures built prior to 1978 that have not been surveyed as of the date of this report are suspected of containing LBP.

A formal LBP management program at SIAD, when in place, should be performed in accordance with the following Army documents/guidelines:

- Department of the Army

Memorandum, "Policy Guidance - Lead-Based Paint and Asbestos in Army Properties Affected by Base Realignment and Closure"

November 15, 1993

The purpose of the memorandum is to provide Army policy guidance on identifying and eliminating LBP and asbestos hazards for properties affected by BRAC. The guidance requires the following:

- Compliance with all applicable regulations and coordination with regulators to ensure compliance
- Maintenance of minimum essential operations and repair standards to prevent deterioration of BRAC properties and to assure sufficient protection of human health and the environment
- In accordance with Title X of Public Law 102-550, (1) inspection of housing constructed before 1978 (and affected by BRAC activities in which children younger than 6 years of age may be expected to reside) or (2) abatement of LBP in housing constructed prior to 1960
- Taking steps to ensure that (1) properties sold for residential habitation are free of immediate LBP hazards prior to residential habitation or (2) if a property is transferred before the Army can perform the LBP investigation, conditions of sale will prevent use of the property for residential habitation until investigations are completed and potential LBP hazards existing at the time of transfer have been eliminated by the Army or the recipient
- Management of non-defective surfaces in place to prevent their becoming hazards
- Notification of potential transferee if evidence suggests that LBP may be present.

- Department of the Army

Memorandum, "Lead-Based Management Program"

April 28, 1993

The purpose of this memorandum is to determine the greatest health risks and to target resources to achieve acceptable environmental standards for individuals exposed to lead. The memorandum requires the following:

- Assessing lead levels in water
- Assessing blood lead levels in children
- Assessing LBP contamination
- Developing abatement programs for high-risk health areas

- Establishing a data tracking system.

4.2.1 Summary of Program

The Army performed a LBP survey for a number of structures at SIAD in late 1993 and early 1994 (*Henrici Water Laboratory [HWL], 1994*). Painted samples were collected from four residential structures located on SIAD and from playground equipment within the Amedee Court Housing Area. Paint samples collected from structures within the Herlong Parcel included housing units 1109B and 1120B within the Lahontan Court Housing Area. These units were selected because Lahontan Court was constructed in 1976, which is before the date of the 1978 CPSC ruling. These units were also considered representative of LBP concentrations in housing units in Lahontan Court (*Colberg, 1996a*). Additional discussion of LBP in SIAD housing units constructed before 1978 is presented below.

4.2.2 Program Status and EBS Results

The following presents the LBP management program as it relates to the reuse parcels.

4.2.2.1 Herlong Parcel

The construction dates for existing Army-owned buildings within the Herlong Parcel range from the 1940s to 1987 (Table 2). The two housing areas, Lahontan Court and Sierra Court, were constructed in 1976 and 1987, respectively. In March 1996, HLA conducted a site visit of the Herlong Parcel to visually identify the condition of interior and exterior painted surfaces of a representative number of buildings on the parcel and to characterize the general condition of the painted surfaces. In addition, HLA contacted SIAD personnel to ascertain how frequently these buildings have been painted. According to SIAD personnel (*Riess, 1996a*), the interior and exterior surfaces of all housing units are painted approximately every 3 to 5 years and every 7 years, respectively. Painting frequency for nonhousing structures are approximately every 8 years for interior surfaces and every 10 years for exterior surfaces. Mr. Riess indicated that sandblasting of painted surfaces associated with painting and building maintenance has not been performed at SIAD (*Riess, 1996a*). During HLA's site inspection, the exterior of buildings viewed appeared in relatively good condition. Some minor flaking of paint on exposed wooden surfaces, including window sills, doors, and roof eaves, was observed for non-housing structures. Painted surfaces on housing structures was typically in better condition than for non-housing structures. The areas immediately surrounding the buildings consisted of dirt and gravel.

Table 5 shows the analytical results for lead analyses of paint samples collected from buildings within the Herlong Parcel. To demonstrate the range of lead concentrations in other paint samples collected at SIAD, the HWL report (*HWL, 1994*) is included as Appendix C. As shown in Table 5, lead concentrations in paint samples collected from Unit 1109B ranged from 9.6 to 130 mg/kg and ranged from 3.4 to 150 mg/kg for Unit 1120B. These levels are well below the EPA threshold of 5,000 mg/kg lead for abatement of LBP in residential structures. As shown in Appendix C, the highest concentrations of lead were detected in a sample from a housing unit in Circle Court (66,000 mg/kg) and a sample from the playground equipment in the Amedee Court Housing Area (19,000 mg/kg). Neither of these locations is within the Herlong Parcel. Both items sampled were removed from SIAD. Lead concentrations for other samples collected from SIAD, but off of the Herlong Parcel, ranged from 10 to 1,900 mg/kg.

These analytical results show that lead levels in samples collected from the housing area on the Herlong Parcel constructed before 1978 (Lahontan Court) were below levels (5,000 mg/kg) requiring abatement for continued use as residential housing. According to Mr. Colberg, these samples are representative of the lead concentrations in the Lahontan Court Housing Area and, along with the results from other buildings on other parts of SIAD, suggest that LBP was used only sporadically for painting structures at SIAD (*Colberg, 1996a*).

The areas encompassing the approximate locations of former structures on the Herlong Parcel are depicted on Plate 2. According to SIAD personnel, the buildings, including the structures in the Title 8 Housing Area, which contained metal-frame windows, were demolished using a bulldozer (*Riess,*

1996a). Mr. Riess further noted that none of the buildings were demolished by burning or through the use of explosives. During HLA's site visit in March 1996, only minor evidence of demolition debris was visible at the ground surface, including unpainted lumber, roofing materials, and broken pieces of cinderblock construction materials. The demolition debris was only seen in the former Title 8 housing area. Other areas of former buildings, as depicted on Plate 2, have been redeveloped as other housing areas (e.g., Lahontan Court and Sierra Court), are the sites of schools owned and operated by the State of California, and are commonly landscaped or paved.

Random soil sampling was conducted by WA in the vicinity of the former structures located within the Herlong Parcel. The purpose of the sampling was to determine the potential presence of lead concentrations in the soil. WA followed the previously mentioned SAP prepared by HLA. The locations of the former structures were determined by a review of the 1952 Irrigation Riser map. Although total lead was detected in all surface samples, none of the concentrations exceeded 20 ppm, which is approximately twenty times below the U.S. Department of Housing and Urban Development's (HUD, 1995) guideline for the evaluation and control of lead-based paint hazards in housing. According to HUD, lead levels in soil for areas used as a high-contact play area should not exceed 400 ppm. The WA report concludes that the results of the surface soil investigation, including a sample collected at the demolition area (former Title 8 housing), provided no evidence of the presence of lead-based paint that would present an unacceptable health risk at the site of the sample locations (WA, 1996a). Please refer to Plate 2 for the locations of the former buildings.

4.2.2.2 Honey Lake Parcel

Because no buildings or former buildings are known to exist on the Honey Lake Parcel (SIAD, EMD, 1995), LBP is not suspected to be present on the Honey Lake Parcel.

4.3 Radon Reduction Program

The descriptions of the radon reduction program and its status to date are based on information made available to HLA by SIAD. HLA did not perform radon testing or evaluations of the precision, accuracy, or applicability of the methodologies or data presented herein as part of the EBS.

The purpose of the radon reduction program at SIAD is to assess indoor levels of radon and mitigate elevated levels of radon. Radon testing was performed at SIAD in accordance with the following Army documents/guidelines (Colberg, 1995b).

- Department of the Army

Regulation (AR) 200-1, *Environmental Protection and Enhancement*

Chapter 11, "Radon Reduction Program"

May 23, 1990

To identify indoor levels of radon and mitigate elevated levels of radon, Chapter 11 of AR 200-1 requires that the following objectives be achieved:

- Identify structures owned or leased by the Army that have indoor radon levels greater than 4 picocuries per liter of air (pCi/L), which is the EPA's occupancy standard
- Modify all structures with levels greater than 4 pCi/L to reduce levels to less than 4 pCi/L.

- Department of the Army

Army Radon Reduction Program

Instructions Manual for Field Personnel

Prepared by Keller & Gannon

August 1991

The purpose of this document is to provide step-by-step procedures to ensure proper deployment, retrieval, and storage of radon detectors. The manual requires the following:

- Place alpha track monitors in the lowest living area and leave them undisturbed for 90 days
- Place charcoal canister monitors in the lowest living area; leave them undisturbed for a period of 72 hours and analyze them within 24 hours.

- Department of the Army Memorandum

"Radon Reduction Program Completion and Installation Status Update"

September 24, 1993

The purpose of this memorandum is to request that (1) radon testing and mitigation programs be completed as soon as possible and (2) the annual installation ARRPs status report be updated.

4.3.1 Summary of Program

Radon testing using ASTM procedures was originally performed in 1991 by Vail Research Technology Corporation (Vail). The surveys included testing of housing and office buildings basewide. Army policy dictates that buildings with radon levels above 4 pCi/L be retested for 12 months. Buildings with levels above 8 pCi/L must undergo complete remediation within 1 to 4 years. Vail tested representative houses and the chapel (Building 170) for radon within the Herlong Parcel (Vail, 1991).

4.3.2 Program Status and EBS Results

The following presents the radon reduction program as it relates to the reuse parcels.

4.3.2.1 Herlong Parcel

No buildings on the Herlong Parcel or the rest of SIAD installation had radon test results above 4 pCi/L (Vail, 1991). Table 6 summarizes the radon survey results.

4.3.2.2 Honey Lake Parcel

Because no buildings or former buildings are within of the Honey Lake Parcel (Colberg, 1995), no testing was performed at Honey Lake.

4.4 Radiological Survey Program

The following presents the radiological survey program as it relates to the reuse parcels.

4.4.1 Program Status and EBS Results

According to Mr. Mike Chastain, Chief of the Radiation Protection Division of SIAD, no radiological surveys have been conducted at the Herlong or Honey Lake parcels. Site activities do not indicate the use of radiological materials at the SIAD Reuse Parcels (Chastain, 1995). Table 7 summarizes radiological issues at the SIAD Reuse Parcels.

4.5 Ordnance and Explosives Assessment Programs

This section describes the investigations performed to evaluate whether OE from past activities at SIAD is present on the reuse parcels.

OE is defined as bombs and warheads; guided and unguided ballistic missiles; artillery, mortar, and rocket ammunition; small arms ammunition; antipersonnel and antitank mines; demolition charges; pyrotechnics; grenades; torpedoes and depth charges; containerized high explosives and propellants; depleted uranium rounds; military chemical agents; and all similar or related items designed to cause damage to personnel or material. UXO is an item that has failed to function as designed or has been abandoned, discarded, or improperly disposed of and can still function, causing damage to personnel and material. Explosive waste (EW) is defined as uncontainerized high explosives, propellants, or soils with explosive constituents at concentrations sufficient to be reactive and present an imminent safety hazard. The investigations regarding potential physical hazards and contamination from OE and EW at SIAD and the reuse parcels are discussed below.

4.5.1 Summary of Programs

The present mission of SIAD is to provide customers high quality cost-effective operations in the receipt, storage, issue and maintenance of equipment and components for operational and project stocks; and receipt, storage, and issue, maintenance and demilitarization of conventional ammunition. The Main Depot stores and maintains military stocks and tactical support systems. The munitions come to SIAD by truck, train, or air and are stored in munition bunkers called igloos. These igloos are located on the northeastern portion of the base. SIAD routinely demilitarizes surplus ammunition at the demolition pit, also located at the northern portion of the base (SIAD, 1994a).

Any investigations related to suspect OE and EW at SIAD, which includes the investigation and removal of OE, is managed by the U.S. Army Engineer Division, Huntsville (USAEDH), Mandatory Center of Expertise (MCX) for OE at Army installations. The main objective of this program is to evaluate and address physical hazards due to the presence of OE and to address the potential release of hazardous substances to the environment as a result of expended or decayed components of OE. USAEDH's program includes (1) an archive search to identify the types of ordnance and locations of ordnance training areas at SIAD, (2) a random grid sampling program to evaluate the presence of OE, and (3) a clearance program to remove and dispose of OE if it is detected. In general, the sampling program consists of visual and magnetometer sweeps conducted in a representative number of randomly selected grid areas within a parcel. If OE is found, the nature and extent of contamination are evaluated; on the basis of that evaluation, a "clearance" (i.e., removal and disposal action) may be performed over the entire parcel.

4.5.2 Program Status and EBS Results

The following presents the OE assessment program as it relates to the reuse parcels.

4.5.2.1 Herlong Parcel

The only potential OE location identified in the Herlong Parcel is the former Urban Warfare Training Area, located in the Old Title 8 housing area (Plate 2). Exercises involved firing blank cartridges, signal smoke, and grenade simulators (Harnden, 1995). The area was used approximately six to eight times per year for a period of approximately 5 years until the buildings were demolished in 1992. HLA interviewed Captain Kelly Hoepfner, of SIAD Explosive Ordnance Disposal (EOD), with regard to any OE clearance conducted by EOD in the vicinity of the training area. Captain Hoepfner indicated that she was not aware of any calls for OE clearance in the area (Hoepfner, 1995). In a January 3, 1996, memorandum, Mr. A.G. Riess, Director of Public Works for SIAD, stated that "a few explosive charges were placed on the walls and holes were blown in the walls, all charges went off and were accounted for" (Riess, 1996b). Other potential OE areas in the vicinity of the Herlong and Honey Lake parcels are discussed in Section 4.10.

4.5.2.2 Honey Lake Parcel

In September 1996, the US. Army Corps of Engineers, Rock Island District, (COE-RI) issued an Ordnance and Explosives Archives Search Report (ASR) for Honey Lake Range (COE, 1996) which refuted rumors that all of the Honey Lake Parcel had been historically used as a bombing range. The

ASR did confirm the presence of OE in the north-central eastern shore of the parcel, as well as other potential OE locations within 1 mile of the parcel (Figure 9). Based on a remediation investigation and a review of a SIAD historical aerial photograph from 1954, an area on the central eastern shore was identified for detonating and disposal of munitions (MW, 1993; DPW, 1954). The ASR report states that the portions of Honey Lake parcel outside of the north-central eastern shore are uncontaminated (ASR, 1996).

4.6 Polychlorinated Biphenyl's Management Program

The descriptions of the PCB management program and its status are based on information made available to HLA by SIAD (current through March 1996). The purpose of the PCB management program at SIAD is to monitor the physical condition of electrical transformers of SIAD and to evaluate the potential of the transformers to contain PCBs. According to Mr. Colberg, all PCB transformers are to be inspected on a quarterly basis (Colberg, 1996c). Inspection records are maintained in SIAD files.

4.6.1 Summary of Program

The physical condition of transformers on SIAD are monitored on a quarterly basis and reported in quarterly reports maintained in SIAD files (Colberg, 1996c). According to SIAD personnel, no leaks have occurred from transformers at the depot. In May 1993, approximately 340 transformers at SIAD were included in an installation-wide sampling program. Transformers have been removed or changed out over time, but no information about their location or PCB levels is available (Colberg, 1996c). Oil samples were collected from each transformer and analyzed for PCBs. Transformers ranged in capacity from 3 kilovolt amperes (KVA) to 500 KVA. Most of the transformers were pole mounted, but a number of pad-mounted transformers also exist. PCB concentrations in dielectric fluids from these transformers ranged from less than the 5 ppm detection limit to a high of 772 ppm (Colberg, 1995a). Approximately 27 transformers had PCB concentrations above the Toxic Substances Control Act (TSCA) limit of 50 ppm. Fourteen transformers had PCB levels between 5 and 50 ppm. On the basis of these results and the State of California guideline limit of 5 ppm, approximately 40 transformers at SIAD are considered PCB-contaminated.

4.6.2 Program Status and EBS Results

The following presents the PCB management program as it relates to the reuse parcels.

4.6.2.1 Herlong Parcel

The locations of all known existing transformers on the Herlong Parcel are shown on Plate 2. The location of these transformers were identified from an electrical service map (undated) provided by SIAD personnel. In addition, HLA conducted a site visit on March 21, 1996 and verified the locations of all transformers on the Herlong Parcel. Thirty-seven transformers currently exist on the parcel. Most are pole mounted, although a few are pad mounted. Some transformers have been replaced periodically, but no known replacement of Army-owned transformers has been documented for the Herlong Parcel (Colberg, 1996c). According to Lassen Municipal Utility District (LMUD) personnel, the four transformers on the school property are owned and maintained by LMUD (Leiber, 1996). Two years ago the older transformers on the school property were replaced with the current transformers. The older transformers were taken by LMUD to their utility yard where they were tested for PCBs to determine appropriate means of disposal. No analytical results are available from the PCB analyses conducted by LMUD (Leiber, 1996). According to CUC personnel, no transformers are located on the property leased by CUC (Barry, 1996).

The remaining 33 transformers existing on the parcel owned and maintained by the Army were reportedly included in the sampling event in May 1993. Analytical results for the sampling program for these transformers are included in Table 8. As shown in Table 8, only 4 of the 37 transformers on the Herlong Parcel had detectable levels of PCBs (i.e., above 5 ppm). Concentrations in these 4 transformers ranged from 5 ppm to 212 ppm. No known releases of dielectric fluids from transformers and no transformer explosions have occurred on the Herlong Parcel (Colberg, 1996c).

4.6.2.2 Honey Lake Parcel

No known transformers are located on the Honey Lake Parcel (*Colberg, 1995*).

4.7 Petroleum Storage Tanks

This section provides a summary of the petroleum storage tank management program at SIAD. The current status of the program and the status of USTs and ASTs within the Herlong and Honey Lake parcels are based on data available through March 22, 1996. Information is also provided below about other non-Army-owned storage tanks owned and managed by lessees.

4.7.1 Summary of Program

The management program for USTs at SIAD, including management goals and applicable regulatory compliance requirements and objectives, is outlined in the SIAD UST Risk Assessment Report (*ESA, 1990*). That document also includes a complete inventory of existing tanks (as of 1990), tank data information, tank site plans, and tank site photographs. According to the UST program, the ongoing program at SIAD includes a number of basic elements, such as routine monitoring and visual inspections and provides for closure and removal of unused, leaking, or high-risk USTs in compliance with federal, state, and local requirements. The UST risk assessment report also provided a number of recommendations for upgrading or removing USTs considering UST requirements for such upgrades by December 1998. In 1995, SIAD prepared a UST replacement plan outlining the USTs that will be removed or upgraded and the ASTs that will be installed (*MW, 1995a*). The UST Replacement Plan identifies the activities to be performed and the types of tanks to be installed, the construction materials for any replacement tanks (UST or AST), and the schedule for removing or upgrading existing USTs and for installing additional ASTs.

In addition, HLA reviewed tank tightness testing results for USTs available from SIAD EMD files. According to these files, tightness testing has been performed annually since 1990. Results of these tests are discussed below.

4.7.2 Program Status and EBS Results

This section summarizes the status of the petroleum storage tank management program for the Herlong and Honey Lake parcels. Historically, a wide variety of USTs and ASTs have been used on SIAD, including approximately 62 current and former USTs and approximately 35 current and former ASTs. Tank contents have included gasoline, diesel, JP-4, JP-8, oil, and waste oil. These tanks have been used across the depot to provide fuel for building furnaces, vehicles and aircraft, maintenance equipment, and backup electrical generators. In addition, some of the tanks at SIAD have been used to store waste oils from vehicle and equipment maintenance. However, only a small fraction of these tanks occur on the Herlong Parcel and no tanks have ever been identified on the Honey Lake Parcel (*Holsey, 1996b*). Tanks on the Herlong Parcel were used to store diesel; no waste oil or other hydrocarbons were stored in these tanks.

The following sections summarize available information about the occurrence of USTs and ASTs on the Herlong and Honey Lake parcels and describes the environmental conditions associated with the tanks. In addition, several non-Army-owned tanks also exist on the Herlong Parcel and are owned and managed by either the Herlong School District or CUC. Approximately seven UST locations and two AST locations have been identified on the school property leased by the State of California. Four of these USTs reportedly have been removed and three are currently in place (*Fennel, 1996a*). The two ASTs are reportedly being used to store diesel for refueling school busses and lawn maintenance equipment. According to Mr. Leonard Shipley, Superintendent of the Herlong School District, information about the removal of the USTs or status of the three existing USTs or the two existing ASTs is not available (*Shipley, 1995*). In addition, according to personnel at CUC, no USTs or ASTs on the SIAD property are leased by CUC, and no USTs or ASTs ever were on the property (*Barry, 1996*). Mr. Barry noted that a liquid natural gas storage tank is located adjacent to the CUC building. The tank reportedly has a volume of approximately 400 gallons.

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4.7.2.1 Herlong Parcel

An inventory of former and existing USTs on the Herlong Parcel was compiled from the UST Risk Assessment Report (ESA, 1990), the UST Replacement Plan (MW, 1995), the results of a recent assessment of the nature and extent of soil contamination in the vicinity of USTs and ASTs on the parcel, and interviews with personnel from the Herlong School District (Shipley, 1995; Fennel, 1996a) and CUC (Barry, 1996). The locations of existing ASTs were identified by a visual survey of the parcel, a review of SIAD records, and interviews with personnel from Herlong School District (Shipley, 1995; Fennel, 1996a) and CUC (Barry, 1996). A site visit was also conducted in March 1996 to confirm the locations of existing USTs and ASTs.

As listed in Table 9 and shown on Plate 2, the following SIAD-and school-owned tanks are within the Herlong Parcel:

SIAD-Owned

- Eleven former USTs
- Three existing ASTs

School-Owned

- Four former USTs
- Three existing USTs (backfilled with concrete)
- Two existing ASTs and one former AST location.

SIAD-Owned USTs and ASTs

Eleven former USTs on the parcel were owned and managed by SIAD. These USTs have been used to fuel diesel-fired boilers associated with current and former buildings on the parcel. Six former USTs were removed between 1991 and 1994 (Weis, 1996a) and five USTs were removed in 1996 (Ryan, 1997). According to SIAD personnel, the five remaining USTs are scheduled for removal by the end of the calendar year 1996 (Cayer, 1996). SIAD has replaced a number of the former USTs with ASTs and may replace the five existing USTs with other ASTs on an as-needed basis (Darvell, 1996).

The number and locations of former USTs within the Herlong Parcel were identified by comparing the number of tanks listed in the 1990 Risk Assessment Report to the number of tanks listed in the 1995 UST Replacement Plan. According to Mr. A. G. Riess with the DPW, Mr. Dave Holsey with the Environmental Management Department (EMD), and James Ryan, EMS, all USTs on the Herlong Parcel have been removed (Riess, 1996c; Holsey, 1996; Ryan, 1997). In addition, HLA contacted Mr. Carl Kringler, former UST program manager at SIAD, who is currently at Sharpe Army Depot, to inquire on the status of the six USTs removed prior to 1995. Mr. Kringler confirmed removal of two USTs at Buildings 1019 and 2067 in 1991 (Kringler, 1996). SIAD personnel indicated that there were no reported releases of petroleum hydrocarbons from the five existing USTs (Holsey, 1996).

Tightness tests performed from 1990 through 1995 indicate that the five recently-removed USTs were declared tight for 6 consecutive years. (Weis, 1996a; Holsey, 1996). Tightness test documentation for the six former USTs was also available in the SIAD files (AES, 1990; ART, 1991-1994; LTT, 1995). The former USTs were tested at least every other year from at least 1990 until they were removed between 1991 and 1994. According to Mr. Holsey, the tests were performed by firms registered in the State of California to perform tightness testing, and in accordance with the EPA standards applicable at the time the tests were conducted (Holsey, 1996).

Subsurface soil samples were collected by WA during August 1996, at each of the eleven Army-owned UST locations within the Herlong Reuse Parcel. No total petroleum hydrocarbons as gasoline (TPH-g) were detected above laboratory limits of 1.0 to 1.2 ppm in any of the subsurface soil samples collected for this investigation (WA, 1996b). TPH as diesel (TPH-d) was detected in four of the eleven UST locations. Of these four locations, one sample, collected ten feet below ground surface (bgs) at UST 68,

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was found to have a concentration of 380 ppm TPH-d, which is above the TPH-d clean-up "action" level established by LCHD. The concentration dropped to 6.5 ppm at 14 feet bgs. The other three locations had no sample results above the clean-up action level. WA concluded that based on the drop in TPH-d concentrations with depth, TPH-d bearing soil is limited in its horizontal and vertical extent.

In a memorandum dated May 2, 1996, regarding UST sampling requirements at SIAD, Elizabeth Morgan, Environmental Health Specialist with LCHD stated that if soil contamination is present, LCHD will generally allow 50 ppm or less to remain in the soil without further action. However, this will be considered on a case-by-case basis when it can be verified that groundwater will not be adversely impacted. The memo also states that soil with sample results greater than 50 ppm will require further action.

Two of the three ASTs within the Herlong Parcel (AST-29 and AST-30) are used for diesel storage and are protected by a concrete berm or secondary containment (Table 10). The third AST (at Building 1203) was taken out of service in 1995 and is currently empty (*Holsey, 1996*). Surface soil samples were collected by WA in August, 1996. According to the WA report, the samples were collected at AST 1203 only because the other two ASTs were newly installed and had secondary containment structures as described above. Surface soil sample results from AST 1203 indicated concentrations of up to 920 ppm TPH-d and 1.6 ppm TPH-g. Samples were not collected below the surface.

School-Owned USTs and ASTs

Seven former or existing USTs are located within the property leased by the Herlong School District. All seven of the USTs are reportedly currently inactive. Four of these USTs have been removed and three remain in place but have been backfilled with concrete (*Fennel, 1996a*). HLA has attempted to obtain closure information for all seven of the tanks from numerous sources, including the Herlong School District, the SIAD fire department, Lassen Unified School District, and U.S. Department of Education (*Shipley, 1995; Fennel 1996a; Auld, 1996; Westman, 1996; Maxwell, 1996; Ratky, 1995; Vershelldon, 1995*). HLA has also attempted to obtain closure information from SIAD Environmental Management Division and LCDOH (*Colberg, 1995b; Jeude, 1995; Jones, 1996*). No closure information has been identified by any party contacted by HLA. According to information in SIAD files, a tank tightness test was conducted in March 1995 for the 4,000-gallon UST (abandoned in place) located between the two wings at the primary school (*Fennel, 1996b*). According to these records, results for this test indicated the tank was declared tight (*LTT, 1995*). Subsurface soil samples were collected by WA during August, 1996, at each of the seven School-owned UST locations within the Herlong Reuse Parcel. TPH-g was not detected above laboratory limits in any of the subsurface soil samples collected for this investigation. TPH-d was detected in three of the seven UST locations. Of these three locations, none were found to have concentrations of TPH-d above the clean-up action levels established by LCHD.

Two ASTs, denoted as AST-A and AST-B, are located on the property leased by the school district. They are used for diesel and gasoline storage (*Fennel, 1996b*). AST-A was moved from a previous location at the Teachers Quarters, and has been used to store diesel since being brought to the storage yard (*Cook, 1996*). The former location of AST-A at the Teachers Quarters is shown on Plate 7. AST-B consists of a tank with a divider, is used to store gasoline and diesel, and is protected by a concrete berm. No visible signs of leaks or spills were observed in the vicinity of the ASTs during the site visits in October 1995 and March 1996.

Surface soil samples were collected at AST-B by WA in August, 1996. TPH-g was not detected above laboratory limits. WA did not sample the soil at AST-A because the tank has reportedly not been used to dispense fuel since being brought to the yard, sits on asphalt, and did not appear to have any leaks. WA did not observe any apparent staining on the ground (WA, 1996c). Sample results from AST-B indicated concentrations of up to 820 ppm TPH-d. Samples were not collected below the surface soil.

4.7.2.2 Honey Lake Parcel

No known USTs or ASTs exist on the Honey Lake Parcel.

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4.8 Solid and Hazardous Waste Management Program

SIAD's program for managing hazardous wastes was identified by reviewing available documents and interviewing people responsible for implementing procedures in the program. The documents reviewed are described in Section 3.1. The documents indicate that hazardous wastes at SIAD are managed in accordance with applicable federal, state, and local laws and regulations for managing hazardous wastes (e.g., Installation Hazardous Waste Minimization/Pollution Prevention Plan [IHWMP] and AR 200-1).

The SIAD Spill Prevention, Control, and Countermeasure Plan (SPCC) indicates that hazardous materials, such as brake fluid, lead dust, paint and paint strippers, batteries, transmission and motor oils, waste oils, acids, solvents, pesticides, and propellant burns, are stored at SIAD (Table 1 of the SPCC). These materials are stored in USTs, bermed aboveground tanks, satellite waste sites, maintenance shops, storage buildings, and covered concrete containment pads. Table 1 of the SPCC lists storage location and type of hazardous material stored; information was current through the end of 1992. The size of the containers used to store the hazardous materials was not listed.

Spill plans in the SPCC identify requirements for addressing emergencies and spills. Internal SIAD reports including site-specific spill reports were also reviewed. No spills on the Honey Lake Parcel were identified. On the Herlong Parcel various minor spills were reported as occurring between 1987 and 1994 (*Getty, 1995*). These spills included 1 gallon of battery acid, 1 gallon of ink thinner, 2 gallons of Blanket roller wash, and at least four 1-gallon spills of latex paint; SIAD records that each of these spills were remedied within 24 hours of being reported.

One SWMU, the Existing Landfill, exists onbase at SIAD approximately 1 mile north of the Herlong Parcel. A periodic site review about the status of the Existing Landfill at SIAD was prepared in February of 1993 (*MCA, 1993*), as discussed below.

4.8.1 Summary of Program

The purpose of the landfill status report was to perform an engineering evaluation and describe functions of the Existing Landfill (*MCA, 1993*). A summary of facility description documents was presented and the closure and postclosure plan reviewed. The original solid waste facilities permit was issued by the local enforcement agency in 1978. As of December 1995, no enforcement actions had been issued for the previous 5 years, except for minor violations observed by the local California Integrated Waste Management Board inspector. No hazardous waste is permitted in the Existing Landfill.

Nineteen monitoring wells have been installed at the landfill to comply with State of California Article V requirements. TCE was reported in several sample events from one well. No further assessment of the subject well has been performed. Tests conducted in 1987 and 1988 detected elevated levels of arsenic and vanadium. Studies indicated that the elevated levels of arsenic and vanadium were a natural result of the hydrogeologic and climatic conditions at the borrow pit and are not a result of the landfill itself (*MCA, 1993*).

A letter dated October 30, 1992, written by Mr. Martin Diehl, Associate Engineer, Lassen County, states that, in his opinion, SIAD is in conformance with the 1986 Lassen County Solid Waste Management Plan.

4.8.2 Program Status and EBS Results

No SWMUs are located on the Herlong or Honey Lake parcels, as shown on Table 11. The nearest SWMU is the existing sanitary landfill, which is located approximately 1 mile north of the Herlong Parcel, as shown on Plate 6.

No changes are known to have occurred at the Existing Landfill since the 1993 periodic site review. No hazardous materials storage areas were identified within the Honey Lake or Herlong Parcels (Getty, 1995).

4.9 Environmental Restoration Program

This section discusses the principal components of SIAD's IRP. The CERFA program involves the evaluation of the environmental condition of real property, including categorizing property according to the seven CERFA categories and the identification of uncontaminated real property. The IRP, which involves the characterization and cleanup of contaminated property, was formally initiated in 1987, when SIAD, EPA, California Department of Health Services (DHS), and the California Regional Water Quality Control Board, Lahontan District (RWQCB), entered into negotiations regarding investigations of potential sites of environmental concern due to past waste management practices. (DHS and the RWQCB are now two divisions of the State of California-Environmental Protection Agency [Cal-EPA] and are referred to as Cal-EPA.) In 1988, the Army prepared a Master Environmental Plan (MEP) (Argonne, 1988), which identified 22 potential sites of environmental concern. These 22 sites, plus an additional site, were identified in the Federal Facility Site Remediation Agreement (FFA) signed on May 30, 1991. Investigations of the 23 sites have been conducted under the IRP.

The discussion below is an overview of the IRP, the locations of sites within and adjacent to the SIAD Reuse Parcels, the status of site investigations and remedial activities, and the overall strategy for completing the programs.

4.9.1 Installation Restoration Program (IRP)

The IRP program at SIAD, managed by the USAEC, began in October of 1987, before the signing of the FFA in 1991. The FFA, signed by SIAD, Cal-EPA, and EPA Region IX, outlined the investigations to be performed and provided a priority schedule for the 23 sites by assigning phases to the program.

The Group I sites (referred to as OU 1) included the following:

- TNT Leaching Beds Area
- DRMO Trench
- Abandoned Landfill
- Construction Debris Landfill
- Chemical Burial Site
- Honey Lake (Demolition Range).

The Group II sites (referred to as OU 2) included the following:

- Existing Firefighting Training Area
- Ammunition Demilitarization and Renovation Area
- Upper Burning Ground
- Diesel Spill Area
- Building 1003 Area.

The Group III sites (referred to as OU 3) included the following:

- Old Firefighting Training Facility

- Building 210 Area
- Large Sewage Treatment Ponds
- Lower Burning Ground
- Nike Missile Fuel Disposal Site A
- Nike Missile Fuel Disposal Site B
- Toxic Storage Building 578
- 1960 Demolition Area
- Unidentified Pit.

Groundwater from the Potable Supply Wells was characterized as part of the Group II and Group III sites to assess if the depot water supply has been affected. Based on review of the analytical results, no chemicals of concern were identified in the Potable Supply Wells (HLA, 1994). These wells are monitored by SIAD on a quarterly basis.

The two low-priority sites, Existing Popping Furnace and Old Popping Furnace, were later added to the Group I and Group III sites, respectively. The Existing Landfill, which remains active, was removed from the OU 2 list of sites, and is being managed under State of California laws and regulations as discussed in Section 4.8.

4.9.1.1 Summary of IRP Program

The IRP at SIAD has included remedial investigations, ecological evaluations, human health evaluations, and, if necessary, preparation of feasibility studies. To date, Records of Decision (RODs) have been signed on the following sites:

- Existing Firefighting Training Facility (MW, 1994a)
- TNT Leaching Beds Area (MW, 1995b)
- Diesel Spill Area (MW, 1995b)
- Old Firefighting Training Facility (MW, 1995b)
- Nike Missile Fuel Disposal Site A (MW, 1995b)
- Nike Missile Fuel Disposal Site B (MW, 1995b)
- Toxic Storage Building 578 (MW, 1995b)
- Unidentified Pit (MW, 1995b).
- Ammunition Demilitarization and Renovation Area (HLA, 1996b)
- Building 1003 Area (HLA, 1996b)
- Chemical Burial Site (HLA, 1996b)
- Construction Debris Landfill (HLA, 1996b)
- Existing Landfill (HLA, 1996b)
- Existing Popping Furnace (HLA, 1996b)

- Large Sewage Treatment Ponds (HLA, 1996b)
- Lower Burning Ground (HLA, 1996b)
- 1960 Demolition Area (HLA, 1996b).

Investigations are ongoing for the remaining sites identified in the FFA.

Of these 17 sites, only the following sites require remediation:

- Soils at the Existing Firefighting Training Facility
- Soil and groundwater at the TNT Leaching Beds Area
- Soil at the Large Sewage Treatment Ponds
- Soils at the Building 1003 Area.

Remedial investigation and/or feasibility studies have not been completed at the remaining six IRP sites:

- Building 210 Area
- Abandoned Landfill
- DRMO Area
- Honey Lake Demolition Range (a site within the Honey Lake Parcel)
- Old Popping Furnace
- Upper Burning Grounds.

Groundwater contamination plumes have been identified at the following sites, as shown on Plate 5.

- Building 210 Area
- TNT Leaching Bed Site
- Abandoned Landfill.

Isolated detections of TCE in groundwater have been reported at the DRMO Area, as well. As discussed in Section 4.10, none of these groundwater plumes extend onto the Herlong or Honey Lake parcels.

4.9.1.2 Program Status and EBS Results

Herlong Parcel

The only IRP site identified within the Herlong Parcel is the Old Firefighting Training Facility located between Tahoe Avenue and Pacific Street on the east side of the parcel. The site currently consists of an open field measuring approximately 1,000 feet along Tahoe Avenue and 300 feet wide at the center. The topography slopes gently southward toward Pacific Street. The central portion of the site contains an asphalt-paved area measuring approximately 190 feet long by 110 feet wide. The edge of the paved area is bordered by a 2-foot-high berm of soil. Two interior berms run north to south within the paved area and divide it into three approximately equal parts. Sagebrush is within and around the paved area. The site is currently unused.

The paved and bermed area was to have been an ice skating rink (HLA, 1994). The aerial extent of the paved area is approximately 21,000 square feet. The markings on the asphalt indicate that it was probably used as a tennis court. The site was reportedly used as a firefighting training facility in the

early 1960s (Argonne, 1988). Aerial photographs, dated July 13, 1984, show this site in its present physical form.

The 1992 field investigation by HLA at the Old Firefighting Training Facility, under the IRP, consisted of the following activities:

- Collection of 50 soil-gas samples for total volatile hydrocarbon analysis
- Collection of 15 soil samples from 2 soil borings for volatile organic, total petroleum hydrocarbon, and metals analysis.

Results of the field investigation indicated that no further study is required to characterize this site. Although nickel and arsenic were identified as potential chemicals of concern for the human health and environmental evaluations, they were detected at levels slightly above the calculated background concentrations. No evidence exists to suggest that the source of the nickel and arsenic were from Army activities. No significant adverse environmental impact by the Army was identified at the Old Firefighting Training Facility. A No Action ROD was signed by the regulatory agencies in September 1995 for this site (MW, 1995b).

Honey Lake Parcel

The IRP site identified within the Honey Lake Parcel is the Honey Lake Demolition Range (see Figure 3). The maximum acreage of this site is shown on Figure 3; the boundary of this site was taken from the ASR (COE, 1996), which presented a conservative estimate of the range of OE at the site. Further studies being conducted in November 1996 by Montgomery Watson under the IRP in conjunction with the COE-RI will result in reducing the acreage of this IRP site.

According to the ASR, the 55th Pursuit Squadron at Mather Field used the Honey Lake bed as summer camp for aerial gunnery training in 1931 and 1932. Machine guns were fired at ground and towed targets; the aircraft used for this training did not carry or drop any bombs on Honey Lake.

The Honey Lake Demolition Range was used as a surveillance test site and for demolition of munitions. From February through May 1946, weekly shipments of about 265 tons of ammunition, mainly 105-mm shells, were detonated at the site using TNT. It was reported that white phosphorous was also burned at the site in pits that are no longer visible. It was reported that burned mine fuses were buried in the area during the late 1940s (USATHAMA, 1979; ESE, 1983).

Demolition of munitions is reported to have continued at the site during the 1950s. Aerial photographs taken in 1954 by the U.S. Department of Agriculture show areas of heavy cratering in approximately 1,300 acres of the easternmost portion of the lake bed. The last report of any munitions detonations at the site refers to 1977, when an explosive ordnance demolition team detonated some UXO in a cleanup operation (USATHAMA, 1979; ESE, 1983).

Due to the demolition and training activities, UXO may be present at the site. It is reported that in 1976 the area was thought to be moderately contaminated with UXO from activities carried out prior to 1951. The possible presence of UXO beneath the lake sediments has also been noted. The contaminated areas presumably include both underwater and dry areas of the exposed lake bed and shore. The extent of each of these areas at any given time depends on the lake level, which fluctuates with the seasons and years. Metal debris was reported to be scattered out into the lake bed and to be concentrated in some areas (USATHAMA, 1979; ESE, 1983).

In July 1951, the State of California asked that Honey Lake be returned to the State for annexation to a wildlife refuge. Due to the possible presence of UXO, the State deferred acceptance of the entire area in 1978 (USATHAMA, 1979); however, negotiations are currently being undertaken regarding the State's September 1996 acceptance of "uncontaminated" portions of Honey Lake.

The existing RWQCB Lahontan Basin plan includes use of Honey Lake for its present and intended beneficial uses, such as non-water-contact recreation (e.g., fishing, beachcombing), warm- and cold-water habitats, wildlife habitat, and saline water habitat. Contact water recreation may be included in an update of the basin plan, now being prepared. Currently, the present or intended beneficial uses of Honey Lake are not restricted as a result of the possible presence of UXO in the eastern part of the lake (Argonne, 1988). Water quality data, collected by the RWQCB between November 7, 1986, and April 27, 1987, show that the water is of moderate quality, with total dissolved solids (TDS) concentrations below 1,500 mg/L (Argonne, 1988). No data are available for sediments in the eastern part of Honey Lake located near SIAD.

An ordnance survey was conducted at Honey Lake by UXB International, Inc., of Chantilly, Virginia, to determine the extent of UXO and ordnance debris in the eastern portion of Honey Lake. Four 1-acre sites considered representative of the total area containing UXO and related material were selected on the basis of observed density of UXO and scrap metal at the surface. Each of the sites was cleared of all ferrous and nonferrous material to a depth of 8 feet (MW, 1993).

Due to the nature of potential chemical contamination; the 40 years which have passed since munitions were demolished at the site and the number of high-water/low-water cycles since the 1950's; and chemical data obtained from similar sites (e.g., Lower Burning Ground), chemical analysis of sediments at the Honey Lake Demolition Range has been determined to be unnecessary. However, the presence of OE at this site is documented.

4.10 Potential Impacts From Adjoining Properties

This section summarizes potential environmental impacts from properties within approximately 1 mile of the SIAD Reuse Parcels. Areas immediately adjacent to the SIAD Reuse Parcels are shown on Plates 2 and 3. Discussions in this section are based on the review of documents furnished by the Army, reports pertaining to specific environmental concerns, the Vista regulatory agency database (Appendix A), and an offsite reconnaissance.

Asbestos: An ACM survey was conducted by IT (IT, 1988) for all buildings at SIAD. The results for buildings outside the SIAD Reuse Parcels showed that friable and nonfriable ACM was present in many of these buildings. Friable ACM was removed from most of these buildings at SIAD (Gordon, 1996a).

Lead-Based Paint: There are LBP survey results for a limited number buildings outside the SIAD Reuse Parcels (HWL, 1994). Samples were collected from housing units on Scadaddle Way and Circle Street. Analytical results for these lead analyses ranged from 9.9 mg/kg to 66,000 mg/kg. Based on these results, LBP appears present in a number of the buildings sampled. In addition, LBP is suspected to be present in other offsite buildings that were constructed prior to 1978.

Radon: Radon testing for buildings within approximately 1 mile of the SIAD Reuse Parcels found no buildings with concentrations exceeding 4 pCi/L (Vail, 1991).

Radiological Surveys: Radiological surveys of buildings adjacent to the SIAD Reuse Parcels have not been performed (Chastain, 1995).

Ordnance and Explosives: OE storage was not identified within 1 mile of the SIAD Reuse Parcels (SIAD, 1994a).

Polychlorinated Biphenyl's: No releases of transformer oil or PCB-containing materials are documented for the areas within or immediately surrounding the SIAD Reuse Parcels (Colberg, 1995a).

Underground and Aboveground Storage Tanks: Approximately 15 existing USTs are located within approximately 1 mile of the SIAD Reuse Parcels (MW, 1995a). Plate 2 illustrates the location of six of these existing USTs immediately adjacent to the parcel. The remaining 9 existing USTs are located between 0.25 and 1 mile northeast of the parcel. HLA was unable to identify any former USTs within

1 mile of the SIAD Reuse Parcels based on file review and interviews with SIAD and Lassen County Department of Health (LCDOH) personnel (MW, 1995a; Colberg, 1995b; Jeude, 1995).

Solid Waste Management Units: One SWMU, the Existing Landfill, exists approximately 1 mile north of the Herlong Parcel. This facility is managed in accordance with guidelines outlined in the Periodic Site Review of the Sierra Army Depot Sanitary Landfill (MCA, 1993).

Installation Restoration Program: HLA identified four IRP sites within 1 mile of the Herlong Parcel and two IRP sites within 1 mile of the Honey Lake Parcel (Plates 3 and 6).

The following is a summary of the IRP sites near the Herlong Parcel:

- Existing Firefighting Training Area (approximately 0.3 mile north of the parcel)
 - The ROD for this site was signed in 1994, which addresses diesel-contaminated soils. Cleanup of the contaminated soil by bioventing was initiated in 1994 and is on-going. This is the only remedial action to occur at this site.
- Building 1003 Area (adjacent to the north boundary of the parcel)
 - In January 1988, a waste oil spill, resulting from a clogged oil/water separator at Building 1003, was discovered on the north side of Susanville Road, north of the parcel. Approximately 170 cubic yards of soil were affected with total petroleum hydrocarbons at concentrations greater than 1,000 mg/kg. Groundwater does not appear to have been affected by the waste oil spill (MW, 1994b). In the October 1995 Focused Feasibility Study for the Building 1003 Area, Montgomery Watson recommended that the affected soil be remediated by in situ bioremediation.
- Abandoned Landfill (approximately 0.65 mile northeast of the parcel)
 - In 1990, TCE was detected in groundwater samples beneath the Abandoned Landfill (ALF). The maximum TCE concentration detected was 95 micrograms per liter (µg/L). TCE was detected in a monitoring well approximately 100 feet south of the southern boundary of the ALF. The lateral extent of TCE-affected groundwater has not been assessed (MW, 1993). Montgomery Watson recommended that the extent of TCE affected groundwater be assessed; additional studies are being conducted at this site.
- Large Sewage Treatment Ponds (approximately 0.65 mile north of the parcel)
 - The Large Sewage Treatment Ponds are located in the south-central portion of the Main Depot, as shown on Plate 4. The site contains four unlined ponds. The four unlined ponds occupy an area of approximately 600 feet by 600 feet square. Additional areas of concern include a soil mound near the lagoons and a sump area (HLA, 1995). Results of sampling and analysis and human health evaluation and ecological evaluation indicate that surface and subsurface soil are the only media of concern at the Large Sewage Treatment Ponds that require action. Potential chemicals of concern include: arsenic, alpha-chlordane, gamma-chlordane, chromium (total), 4,4'-DDD, dieldrin, nickel, PCB-1260, and thallium (HLA, 1995). Results of HLA's Final Feasibility Study indicate that the preferred remedial alternative for the site is to remove the soil mound and the upper 1 foot of soil in the northern pond (HLA, 1995).

The following is a summary of the IRP sites near the Honey Lake Parcel:

- Nike Missile Fuel Disposal Site A (approximately 0.65 mile east of the parcel)
 - The Nike Missile Fuel Disposal Site A is located in the northwest portion of the Main Depot east of Pole Line Road (Plate 3). The site covers an area measuring approximately 800 feet by 900 feet and was used for the disposal of fuel components from Nike Ajax missiles. The site is

a relatively flat and barren open area supporting limited grassy vegetation. Sagebrush surrounds the site and delineates its boundary. The site is currently unused (HLA, 1994).

- Fuel disposal activities reported at this site included the burning of aviation gasoline (JP-4) in shallow pits measuring approximately 10 feet by 10 feet by 1.6 feet deep, and the evaporation of inhibited red-fuming nitric acid in small aluminum dishes adjacent to the burning pits (Argonne, 1988).
- Nitrate plus nitrite-N was detected in concentrations that appeared to be elevated in surface and subsurface soil samples at one boring location. Elevated levels of nitrate plus nitrite-N were not detected in the groundwater samples. No contaminants of concern (COCs) were identified in the HHE and EE. A No Action Record of Decision was signed for this site in September 1995.
- Unidentified Pit (approximately 0.1 mile east of the parcel)
 - The Unidentified Pit is located adjacent to Honey Lake outside the main installation access control fence in the southwest portion of the Main Depot (Plate 3). This oval-shaped pit measures approximately 110 feet by 45 feet by 10 feet deep and was observed by the U.S. Army Environmental Hygiene Agency (USAEHA) during a helicopter flight over SIAD in 1989. Information regarding prior uses of the pit was unobtainable. During HLA's site reconnaissance visit, a shallow 3-foot-wide ditch was observed leading from the pit west toward Honey Lake (HLA, 1994). A dry, white substance was observed on the soil in the bottom of the pit. The substance appeared to be calcium carbonate or other alkali salts leached from the soil. Aerial photographs, dated July 13, 1984, show the Unidentified Pit as an oval-shaped pool of water connected, by a canal to Honey Lake (HLA, 1994).
 - Geophysical data revealed the absence of bomb fragments or subsurface disposal. Several inorganic compounds were detected at levels that exceeded the calculated background concentrations in surface and subsurface soils, as well as in groundwater. These concentrations appear to have resulted from upward groundwater capillary action and evaporation rather than the result of Army activities. The Army agreed to replace the excavated soil into the pit. A No Action Record of Decision was signed by the regulatory agencies for this site in September 1995 (MW, 1995b).

Other Environmental Issues: A shallow pit approximately 20 feet wide by 60 feet long containing black tar and stressed vegetation exists approximately 1.5 miles south of Wendell (Plate 3). During the HLA site visit, the pit was observed to be surrounded by a cyclone fence and marked with California Department of Toxic Substances Control (DTSC) signs labeling the contents as hazardous material. Based on recent survey data, SIAD personnel stated that the tar pit is outside the Honey Lake Parcel (Colberg, 1996c).

The pit south of Wendell and several others (approximately 1 mile west of Wendell off the Honey Lake Parcel) were listed under the States Priority Sites list in the Vista database report (Appendix A). The Vista report indicates that the sites are part of the Southern Pacific Railroad (SPRR) facility in Wendell and that they are a low priority for a preliminary assessment under the DTSC Site Assessment Program (Vista, 1995).

None of the identified environmental conditions on adjoining properties are reported to affect the SIAD Reuse Parcels soil and groundwater quality. However, agricultural run-off into Honey Lake associated with farming and ranching activities in the area may impact water quality of the lake.

4.11 Air Quality

SIAD has prepared an air quality management plan to provide guidance for effectively implementing and managing an air quality compliance program (SIAD, 1994b). This guidance is meant to conform with applicable DoD directives and federal, state, and local environmental regulations.

The objectives of the management plan are to furnish SIAD employees with information concerning applicable air quality compliance requirements to achieve and maintain air quality. Air quality compliance involves prevention, control, abatement, and documentation of emissions from:

- Fixed exhaust stack or vents
- Natural gas-fired boilers
- Incinerators
- Stationary engines
- Munitions use
- Motor vehicles
- Miscellaneous paint and solvent use
- Aircraft
- Gasoline storage and transfer.

The SIAD EMD will coordinate with the applicable organizations (motor pool/public works) in developing and implementing a program to provide required certification or licensing of the base-level operators of air emission sources.

4.12 Pesticide Management

The Army prepared and implemented a Pesticide Management Plan (PMP) for SIAD (Westec, 1995). According to the PMP, implementation of the plan provides for effective, safe, and environmentally sound methods for the elimination of unwanted pests, primarily insects, rodents, and undesirable plants. The PMP identifies the types of pests and defines the method of control of these pests at SIAD. The primary goal of the PMP is to provide a sufficient amount of guidance to implement and maintain an effective pest control program. The plan also identifies and prioritizes pests and their destructive effects so that informed decisions can be made regarding the required level of control. The PMP is maintained through annual updates which are reviewed and approved by Major Army Command Pest Management Consultant.

Pests included in the PMP are:

- General household and nuisance pests
- Structural pests
- Weeds
- Disease vectors and other health-related pests
- Ornamental plant and turf pests
- Animal pests, and
- Miscellaneous pests.

Implementation of the PMP is according to Army Regulation 420-76 Pest Management and under the immediate direction of the SIAD Pest Management Coordinator. Pesticides and herbicides are currently stored in Building S-79 and will continue to be stored there under the PMP. The Pesticide Management Shop (Building S-79) has separate pesticide storage and mixing facilities as well as a decontamination

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slab, eye wash, shower, and security fence. Daily records of pest inspection and control operations are maintained by SIAD personnel.

According to SIAD Pest Management Coordinator, Arthur J. Gomez, the following is the total pesticide use at SIAD between the years 1989 and 1996:

Bendiocarb	0.60 lbs.
Chlorpyrifos	100 lbs.
Pyrethrum	0.01 lbs.
Boric acid	0.50 lbs.
Hydramethynon	0.00061 lbs.
Carbarye	0.01 lbs.

Mr. Gomez indicated that the use of pesticides at SIAD are limited in nature and areal extent.

5.0 FINDINGS AND CONCLUSIONS

5.1 Findings

This EBS presents an overview of existing environmental conditions on the SIAD Reuse Parcels based on available information. Available information concerning the environmental conditions on the SIAD Reuse Parcels has been gathered and summarized in this EBS. Findings of the EBS for the SIAD Reuse Parcels include:

- The parcel boundaries used in this study and shown in this report are approximate and are identified on the basis of information provided from SIAD.
- Asbestos surveys were completed on select buildings within the Herlong Parcel. Friable ACM was removed from all the non-housing buildings with the exception of Buildings 2067 and 2069, which contain friable ACM in pipe lagging located in crawlspaces. Friable ACM was removed from all buildings in the Lahontan Court housing area (Buildings 1101 through 1120). It is unknown if friable and nonfriable ACM exist in Buildings 1121 through 1160 because they were not surveyed for ACM. Based on their date of construction (1987) and building practices at the time, it seems unlikely that friable ACM is present in these housing units. Nonfriable ACM may exist in all the buildings in the Herlong Parcel, as identified on Plate 2. ACM-affected soil may exist in areas of former structures, indicated on Plate 2, where buildings constructed prior to 1981 have been demolished. ACM is not suspected to be present on the Honey Lake Parcel because no buildings are known to exist on that parcel.
- Lead surveys were performed for a few buildings within the Herlong Parcel. Lead concentrations in samples collected from representative painted surfaces ranged from 9.6 mg/kg to 150 mg/kg. LBP was removed from the jungle gym at the primary school in the Herlong Parcel (*Colberg, 1995b*). Buildings constructed prior to 1978, indicated on Plate 2, are suspected to contain LBP. The extent of LBP-affected soil was evaluated and results provided no evidence of the presence of lead-based paint that would pose an unacceptable health risk at the site of the sample locations. LBP is not suspected to be present on the Honey Lake Parcel because no buildings are known to exist on that parcel.
- Radon surveys were conducted for selected buildings and the chapel on the Herlong Parcel. None of the buildings within the SIAD Reuse Parcels that were tested had radon levels above 4 pCi/L.
- No buildings in the SIAD Reuse Parcels were identified for radiological surveys.
- At the Herlong Parcel, potential OE is not suspected at the former Title 8 Housing Area, where urban warfare training occurred from approximately 1987 to 1992. OE is present in the Honey Lake Demolition Range in the Honey Lake Parcel (Figure 3).
- Transformer dielectric fluids have been tested for PCBs in approximately 40 transformers basewide. Only four transformers in the Herlong Parcel contained PCBs. Concentrations ranged from 5 to 212 ppm. No releases of PCB-contaminated dielectric fluids have been reported for the area within the SIAD Reuse Parcels.
- Releases of petroleum hydrocarbons have been reported for few of the existing USTs and ASTs on the Herlong Parcel; those areas exceeding regulatory concern have been depicted as Category 7 on Plate 7. Those locations where releases have not occurred but storage has occurred are depicted on Plate 7 as Category 2. Details regarding closure data of former USTs managed by SIAD and closure data of former USTs managed by the State of California at the schools on the Herlong Parcel were not available.
- SWMUs were not identified within the SIAD Reuse Parcels.

- The only IRP site identified under the SIAD IRP within the Herlong Parcel is the Old Firefighting Training Facility. A No Action ROD was signed by the regulatory agencies for this site in September 1995. On the basis of that No Action ROD, all remedial actions for the site have been taken.
- No groundwater monitoring wells are present on the SIAD Reuse Parcels.
- None of the identified environmental conditions on adjoining properties, discussed in Section 4.11, are reported to affect environmental conditions within the SIAD Reuse Parcels for the purposes of property transfer.

5.2 Conclusions

Available information regarding the environmental conditions on the Herlong and Honey Lake parcels has been assembled and reviewed as it pertains to transferability of the property under the requirements of CERCLA § 120(h)(3) or (4) or based on Army or DoD policy regarding other safety concerns. Based on the findings of this EBS presented in the previous section, the following conclusions are made:

- There is no evidence of any releases of hazardous substances or petroleum products or their derivatives on the Herlong parcel
- Storage of hazardous substances and petroleum hydrocarbons on the Herlong parcel by SIAD occurred at four electrical transformers and eleven USTs and three ASTs, which were used to store petroleum hydrocarbons
- ACM surveys have been conducted in all structures in the Herlong Parcel, except the newest housing units (Buildings 1121 to 1160), which were constructed in 1987 and Buildings 1101 through 1109 and 1111 through 1120 (which are similar to Building 1110); no structures exist on the Honey Lake Parcel; friable ACM was removed from all structures on the Herlong Parcel in which it was detected and from Buildings 1101 through 1109 and 1111 through 1120, except Buildings 2067 and 2069; nonfriable ACM was removed from selected structures
- The Old Firefighting Training Area is the only IRP site within the Herlong Parcel; the site has been investigated and a No Action ROD was signed in September 1995 indicating that no remedial actions are necessary for that site
- The Honey Lake Demolition Range in the Honey Lake parcel is known to contain OE.

Information compiled in this EBS are discussed in the following section, Section 6, CERFA, and are interpreted and categorized according to the DoD Categories 1 through 7.

6.0 COMMUNITY ENVIRONMENTAL RESPONSE FACILITATION ACT (CERFA) REPORT

This section discusses the CERFA program, including the general purpose of CERFA legislation, the effect of the legislation on real property transfer, and the findings of the SIAD CERFA investigation. Identification of uncontaminated property incorporates recent changes in CERCLA § 120(h), which includes as uncontaminated, areas where storage of hazardous materials or petroleum products has occurred, provided no releases have occurred.

6.1 Summary of CERFA Program

CERFA (Public Law 102-426) was enacted on October 19, 1992, and amended CERCLA in two principal areas. First, CERFA added CERCLA § 120(h)(4), which requires the identification of uncontaminated property ("DoD Category 1"). The fundamental purpose of CERCLA § 120(h)(4) is to expedite identification of real property having the greatest opportunities for redevelopment at facilities at which selected federal operations are terminating or are being realigned. Properties are identified by evaluating their current and historical uses. Specific procedures for conducting the evaluation are described in the CERFA legislation and DoD and Army guidance. In general, the procedures encompass the following:

- A search of government records
- Review of property ownership history
- Review of aerial photographs reflecting prior uses
- Visual inspection of the property
- Physical inspection of and review of information for adjacent properties
- Interviews with current or former employees.

For installations on an IRP under an interagency agreement, the identification of uncontaminated property is not considered complete until the regulatory agencies concur.

The second principal change provided by CERFA is in the clarification of the requirements of CERCLA § 120(h)(3) for declaring that all necessary remedial actions have been taken. Generally, according to CERFA, remedial action has been taken if an approved remedial system has been constructed and demonstrated to the administrator of the EPA to be operating properly and successfully. This revision permits the transfer of real property within a time frame significantly more favorable to communities surrounding closing installations by allowing such transfer to potentially proceed well before remedial actions are concluded.

The DoD Authorization Act for Fiscal Year 1997 made some additional changes in CERCLA that affects the transfer of property at closing installations. A principal change was the refinement to the definition of uncontaminated property providing for property where storage of hazardous materials or petroleum products or their derivatives has occurred, but release or disposal has not occurred, to be considered uncontaminated and available for transfer under CERCLA § 120(h)(4). However, because the changes were not final at the time this report was finalized, no changes to the environmental condition of property categories was made.

As noted above, a focus of the CERFA program is the identification of uncontaminated property. The CERFA findings are based on the EBS results and conclusions under Sections 4.0 and 5.0. Because real property identified as uncontaminated under CERFA appears to have no history of release or disposal of CERCLA hazardous substances or petroleum products or their derivatives, and because no remedial

actions are, therefore, considered necessary, a deed for transfer of such real property can indicate that the requirements of CERCLA § 120(h)(4) have been met.

6.2 CERFA Evaluation For The SIAD Reuse Parcels

The environmental issues of concern identified in the SIAD Reuse Parcels were evaluated to classify subareas of each parcel according to DoD Categories 1 through 7, as discussed in Section 3.7. The results of the evaluation and the categories identified for each parcel are discussed below.

Herlong Parcel

Plate 7 presents the CERFA map for the Herlong Parcel. As shown on Plate 7, the majority of the undeveloped area and part of the commercial area are considered DoD Category 1 because no storage, release, or disposal of hazardous substances or petroleum products were identified during the EBS for those areas. Other isolated areas within the commercial area of the parcel are considered DoD Category 2 because of current and/or former ASTs or USTs in those areas that have been used to store petroleum products and the presence of (current and past) PCB-containing transformers. Several former or existing Army-owned UST or AST sites within the parcel are categorized as DoD Category 3 or 7. In addition, a few State-leased UST or AST locations are categorized as DoD Category 3 or 7 due to documented release of petroleum products.

Plate 7 outlines the areas discussed above and their respective DoD Environmental Conditions. The white areas, DoD Category 1 (uncontaminated), are available for transfer under CERCLA § 120(h)(4) (Plate 7). The blue areas, DoD Category 2 (storage only), are also available for transfer under CERCLA § 120(h)(4) (Plate 7). Areas depicted as DoD Category 3 are transferable under CERCLA § 120(h)(3). Those shown as DoD Category 7 are not considered transferable at this time.

Many of the buildings within the DoD Category 1 and 2 areas are suspected of containing ACM and LBP. If the structure contains ACM that is not in compliance with applicable laws, regulations, and standards, or if it poses a threat to human health at the time of transfer, DoD policy requires that the ACM be remediated prior to transfer (*DoD, 1994*). Similarly, if the structure was constructed prior to 1978, a LBP survey and possible abatement depending on the survey results and building construction date are required prior to transfer (*DoD, 1994*).

As discussed in Section 4, the area of former structures on the Herlong Parcel, outlined on Plate 7, was evaluated and found not to contain ACM or LBP in the soil. Accordingly, these areas have been classified as DoD Category 7 and are currently transferable and CERCLA § 120(h)(4).

Honey Lake Parcel

Plate 8 presents the CERFA map for the Honey Lake Parcel. As discussed in Section 4, the ASR indicated that most of Honey Lake is uncontaminated with respect to OE. Accordingly, as shown on Plate 8, most of Honey Lake Parcel is considered DoD Category 3 because of the possible release of lead from bullets strafed into the lake bed and is available for transfer under CERCLA § 120(h)(3). The area of Honey Lake within the former Honey Lake Demolition Range located at the extreme eastern shore of the lake, is considered DoD Category 7 due to the presence of OE in some portion of that area.

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Final

JC47692-SI
February 21, 1997

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TABLES

**Table 1. Summary of Previous Landowners
Environmental Baseline Survey
Sierra Army Depot Reuse Parcels
Lassen County, California**

Herlong Parcel

Tract 64
Standard Realty & Development Company
D/T No. 2 (Civil Action 4823) 3/6/44

Tract 65
Estate of Stanley G. Rayl
D/T No. 1 (Civil Action 4823) 1/17/44

Tract 66
Western Pacific Railroad Company
D/T No. 2 (Civil Action 4823) 3/6/44

Honey Lake Parcel

Tract 1
Frank E. Palin
Declaration of Taking (D/T) No. 4 (Civil Action 4441) 5/27/42

Tract 3
State of California
Purchased by Department of the Army 5/5/92

Tract 24
Mrs. Rose Edwards
D/T No. 2 (Civil Action 4441) 5/19/42

Tract 26
James and Catherine Lally
D/T No. 2 (Civil Action 4441) 5/19/42

Tract 27
Estate of James L. Humphrey
D/T No. 1 (Civil Action 4441) 5/19/42

Tract 28
Catherine Lally
D/T No. 2 (Civil Action 4441) 5/19/42

Tract 43
State of California
Purchased by Department of the Army 5/5/92

**Table 1. Summary of Previous Landowners
Environmental Baseline Survey
Sierra Army Depot Reuse Parcels
Lassen County, California**

Honey Lake Parcel (Cont'd)

Tract 44
Estate of James L. Humphrey
D/T No. 1 (Civil Action 4441) 5/19/42

Tract E
State of California 1933

Source: Sierra Army Depot Department of Public Works

**Table 2. Summary of Building Activities
Environmental Baseline Survey
Sierra Army Depot Reuse Parcels
Lassen County, California**

Building Number	Construction Activity	Date
165	Mess Hall	1976
166	Barracks	1976
167	Barracks	1976
168	Barracks	1976
170	Chapel	1976
T-1019*	Bowling Alley	1942
2067	Community Center	
	Credit Union	
	Barber Shop	
	Beauty Shop	
	Education Center	
	Gift Shop	
	Library	
	Post Office	
2069	Post Exchange	1944
	Military Clothing Service	
	Army Community Service	
	Civilian Welfare Fund	
2071	Theater	1944
2072	Communication Substation	Unknown
T-1010	Training Office, Laundromat	1942
T-1202	Unknown	Unknown
T-1203	Old Barracks	1944
T-1204	Unknown	Unknown
T-1217	Teen Center	1942
T-1223	Military Personnel Offices	1960
T-2081	Snack Shack	Unknown
T-2083	Portable Storage Box	Unknown
1101 - 1120	Housing (Lahontan Court)	1976
1121 - 1160	Housing (Sierra Court)	1987

Note: Buildings within the Herlong Parcel owned by the State of California and Citizen's Utility Company are not included in this table. No buildings exist on the Honey Lake Parcel.

* Building T-1019 was demolished by the Army in 1991 (*Gordon, 1995*)

**Table 3. EBS Points of Contact
Environmental Baseline Survey
Sierra Army Depot Reuse Parcels
Lassen County, California**

Sierra Army Depot Program

Mr. James M. Ryan	Chief, Environmental Management Division
Mr. Andy Reiss	Director, SIAD Department of Public Works
Mr. Gene Long	RCRA, OB/OD Air
Ms. Susan Holiday	RCRA, Deactivation Furnace
Mr. Robert Weis	Restoration, Acting BEC
Mr. John Colberg	Wildlife, NEPA, PCB, LBP, Asbestos, Radon
Ms. Susan Getty	EPCRA, RCRA, Landfill
Ms. Karin Peternel	GIS, Hydrology
Ms. Carol Gordon	Department of Public Works, Real Estate
Mr. Carl Siel	Ordnance and Explosives
Capt. Kelly Hoepfner	Ordnance and Explosives
Mr. Robert Harnelen	Ordnance and Explosives
Mr. Mike Chastain	Radiation Protection
Mr. Bill Heyland	Airstrip O&M
Mr. Dave Holsey	Petroleum Storage Tanks

U.S. Army Environmental Center

Mr. Harry Kleiser	Installation Restoration Division
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Lassen County

Mr. Mark Jeude	Lassen County Department of Environmental Health
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State of California

Dr. Leonard Shipley	Tanks, Superintendent School District
Mr. Laten Ratky	Tanks, Transportation, Maintenance, Operations
	Supervisor of School District
Mr. Leroy Fennel	Tanks, Head of Maintenance and Grounds

U.S. Department of Education

Mr. Michael Vershelldon	Tanks, Herlong High School
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Table 4. Summary of IT 1988 Asbestos Survey Program
Herlong Parcel
Environmental Baseline Survey
Sierra Army Depot Reuse Parcels
Lassen County, California

Building No.	ACM Suspect Samples Analyzed	Nonfriable ACM	Friable ACM	Comments
165-168	Yes	No	No	--
170	Yes	Yes	Yes	Friable ACM removed (Vanderville, 1995)
T-1019*	Yes	Yes	Yes	Friable ACM removed (Vanderville, 1995)
2067	Yes	Yes	Yes	Friable ACM not removed (Vanderville, 1995)
2069	Yes	Yes	Yes	Friable ACM not removed (Vanderville, 1995)
2071	Yes	Yes	Yes	Friable ACM removed (Vanderville, 1995)
2072	Yes	No	Yes	Friable ACM removed (Vanderville, 1995)
T-1010	Yes	Yes	Yes	Friable ACM removed (Vanderville, 1995)
T-1202	Yes	Yes	Yes	Friable ACM removed (Vanderville, 1995)
T-1203	Yes	Yes	Yes	Friable ACM removed (Vanderville, 1995)
T-1204	Yes	Yes	Yes	Friable ACM removed (Vanderville, 1995)
T-1217	Yes	Yes	Yes	Friable ACM removed (Vanderville, 1995)
T-1218	Yes	Yes	Yes	Building (approximately 300 feet west of Building T-1204) demolished since survey
T-1223	Yes	Yes	Yes	Friable ACM removed (Vanderville, 1995)
T-2081	No	--	--	Building demolished since survey
T-2083	No	--	--	Building demolished since survey
1101 - 1109	No	--	--	Friable ACM removed (Vanderville, 1995)
1110	Yes	Yes	Yes	Friable ACM removed (Vanderville, 1995) Nonfriable ACM in flooring removed (Vanderville, 1995)
1111 - 1120	No	--	--	Friable ACM removed (Vanderville, 1995).
1121 - 1160	No	--	--	Friable ACM absent; nonfriable presumed present, based on construction date (1987)

* Building T-1019 was demolished by the Army in 1991 (Gordon, 1995)

ACM = Asbestos Containing Material

**Table 5. Summary of February 1994 Henrici Water Laboratory
Lead Analysis Report
Environmental Baseline Survey
Sierra Army Depot Reuse Parcels
Lassen County, California**

Bldg. No. and Address	Sample Location	LBP Analysis Results (mg/Kg)*
1109 B Tahoe	closet	9.6
1109 B Tahoe	back door	84
1109 B Tahoe	front door	23
1109 B Tahoe	bedroom window	110
1109 B Tahoe	back fence	130
1120 B Lassen	front door	150
1120 B Lassen	back door	3.4
1120 B Lassen	back fence	120
1120 B Lassen	shelf	17
1120 B Lassen	window	83

mg/kg = milligrams per kilogram

* Samples analyzed by EPA Method 7421

No buildings exist on the Honey Lake Parcel

**Table 6. Radon Survey Results
Environmental Baseline Survey
Sierra Army Depot Reuse Parcels
Lassen County, California**

Building Numbers	Isotope(s) Present
------------------	--------------------

No buildings within the Herlong Parcel had radon survey results above 4 pCi/L. No areas within the Honey Lake Parcel were tested for radon because no buildings were identified on the parcel.

pCi/L = Picocuries per liter of air.

**Table 7. Radiological Surveys in Buildings
Environmental Baseline Survey
Sierra Army Depot Reuse Parcels
Lassen County, California**

Building Numbers	Isotope(s) Present
No buildings or areas were identified by SIAD for radiological surveys within the SIAD Reuse Parcels.	

**Table 8. Summary of Detected Polychlorinated Biphenyl's (PCBs)
in Pole-Mounted Transformers
Environmental Baseline Survey
Sierra Army Depot Reuse Parcels
Lassen County, California**

Location	Serial No.	KVA	PCB Results
Northeast Bldg. T-1217	60S4877	75	5 ppm ¹
Northeast Bldg. T-1217	61S8681	75	5 ppm ¹
Athletic Field	7093563	25	212 ppm ¹

Thirty other electrical transformers are located on the Herlong Parcel and were also sampled and analyzed for PCBs in May 1993. Concentrations of PCBs in these other transformers were below 5 ppm (Colberg, 1996b). The location of all existing transformers on this table are shown on Plate 2; transformer serial numbers are shown on Plate 2 for those transformers in which PCB concentrations were equal to or greater than 5 ppm. As shown on Plate 2, four transformers are located on property leased by the Herlong School District and three transformers are on property leased by CUC. One transformer (Serial No. 7093567) formerly located near Building 1010 was removed in January 1997; the site of this former transformer is located on Plate 2. This former transformer was reported to contain 205 ppm¹ PCBs. No transformers exist or were ever located on the Honey Lake Parcel.

PCB = Polychlorinated biphenyl's.
KVA = Kilovolt amperes.
ppm = Parts per million.
CUC = Citizens Utility Company.

Transformers were sampled in May 1993³.

Sources: ¹PCB Quarterly Report, September through December 1995, SIAD (Colberg, 1995a).

²Colberg, 1996b.

³Colberg, 1996a.

**Table 9. Underground Storage Tank Summary
Environmental Baseline Survey
Sierra Army Depot Reuse Parcels
Lassen County, California**

Building	UST No.	Contents	Size (Gallons)	Year Installed	Date Removed
Herlong Parcel					
SIAD-Owned Tanks					
170	112	Diesel	2,000	Unknown	(1996)
1010	5	Diesel	550	Unknown	(1994)
1019	37	Diesel	2,000	Unknown	(1991)
1203	11	Diesel	1,000	1974	(1993)
T-1217	13	Diesel	9,000	Unknown	(1996)
1223	6	Diesel	500	Unknown	(1994)
1214	12	Diesel	1,000	Unknown	(1991)
2069	72	Diesel	10,000	Unknown	(1996)
2067	7	Diesel	6,000	Unknown	(1991)
2067	8	Diesel	12,000	Unknown	(1996)
2071	68	Diesel	2,500	Unknown	(1996)
School-Owned Tanks					
High School	ASO-UST1	Diesel	Unknown	Unknown	In Place
High School	RSO-UST1	Diesel	Unknown	Unknown	Unknown
High School	RSO-UST2	Diesel	Unknown	Unknown	Unknown
High School	RSO-UST3	Diesel	Unknown	Unknown	Unknown
Primary School	ASO-UST2	Diesel	Unknown	Unknown	In Place
Primary School	ASO-UST3	Diesel	Unknown	Unknown	In Place
Teacher's Quarters	RSO-UST4	Diesel	Unknown	Unknown	Unknown

UST = Underground Storage Tank.

No USTs identified on the Honey Lake Parcel.

All School-Owned USTs are inactive (i.e., abandoned in place or removed).

No USTs identified on SIAD property leased by Citizen's Utility Company.

Sources: UST Risk Assessment Report, SIAD, Herlong, CA (ESA, 1990).

**Table 10. Aboveground Storage Tank Summary
Environmental Baseline Survey
Sierra Army Depot Reuse Parcels
Lassen County, California**

Building Number	AST No.	Contents	Size (Gallons)	Berm	Secondary Containment	Year Installed
Herlong Parcel						
SIAD-Owned Tanks						
T-1010	29	diesel	520	yes	yes	unknown
T-1223	30	diesel	520	yes	yes	unknown
1203	--	diesel	~ 250	no	no	unknown
School-Owned Tanks						
Primary School A		gasoline	200	no	no	unknown
Primary School B		diesel/gas	1500	yes	yes	unknown

AST = Aboveground storage tank.
No ASTs identified within the Honey Lake Parcel.

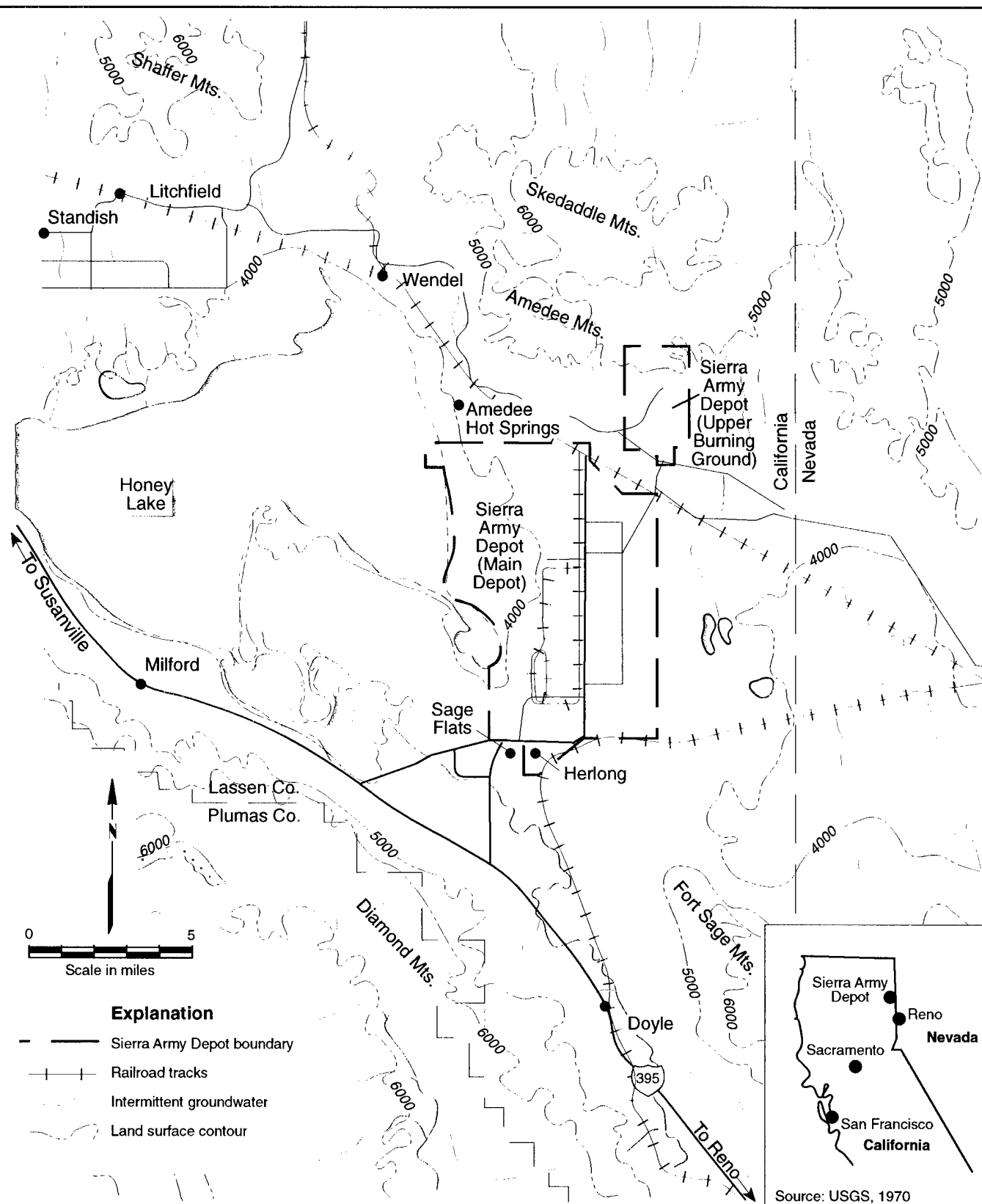
**Table 11. Solid Waste Management Units
Environmental Baseline Survey
Sierra Army Depot Reuse Parcels
Lassen County, California**

SWMU Site No.	SWMU Name	SWMU Type	Status	Associated IRP Site No.
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No SWMUs were identified within the SIAD Reuse Parcels.

SWMU = Solid Waste Management Unit.

PLATES



Harding Lawson Associates

Engineering and
Environmental Services

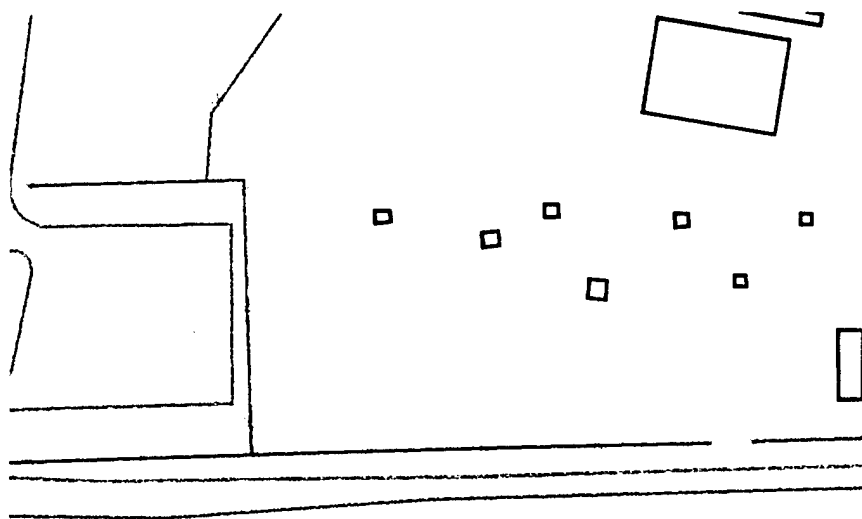


Prepared for:
U.S. Army Environmental Center
Aberdeen Proving Ground, Maryland

Sierra Army Depot, Lassen County, California

Plate 1

Site Location Map
Environmental Baseline Survey



Cal-Pac Utilities
Sub-station

Gate 172

Citizens Utilities Cor
Building

Craig Drive

Ripley Drive

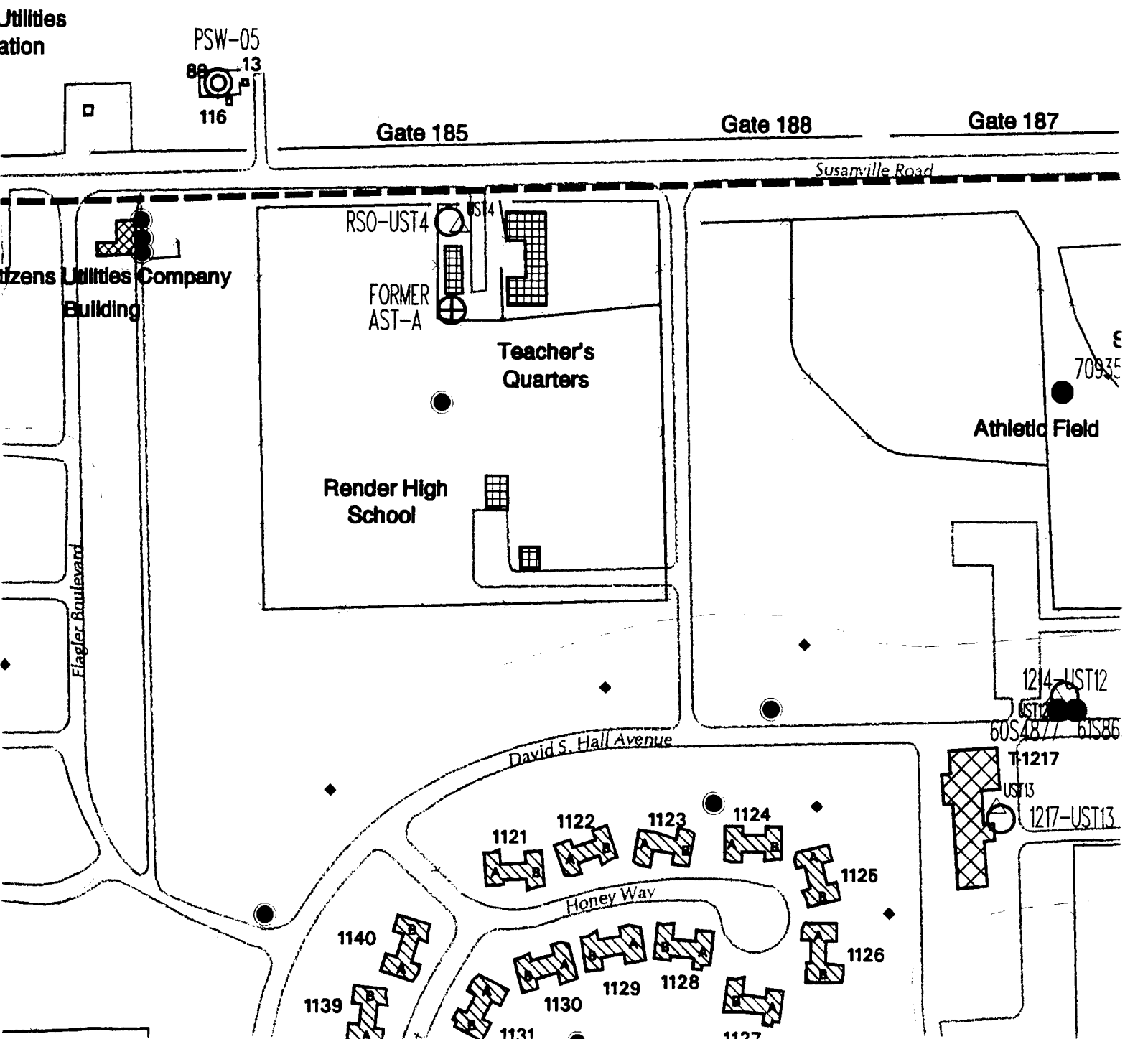
Former Title 8
Housing Area

Ramsey Drive

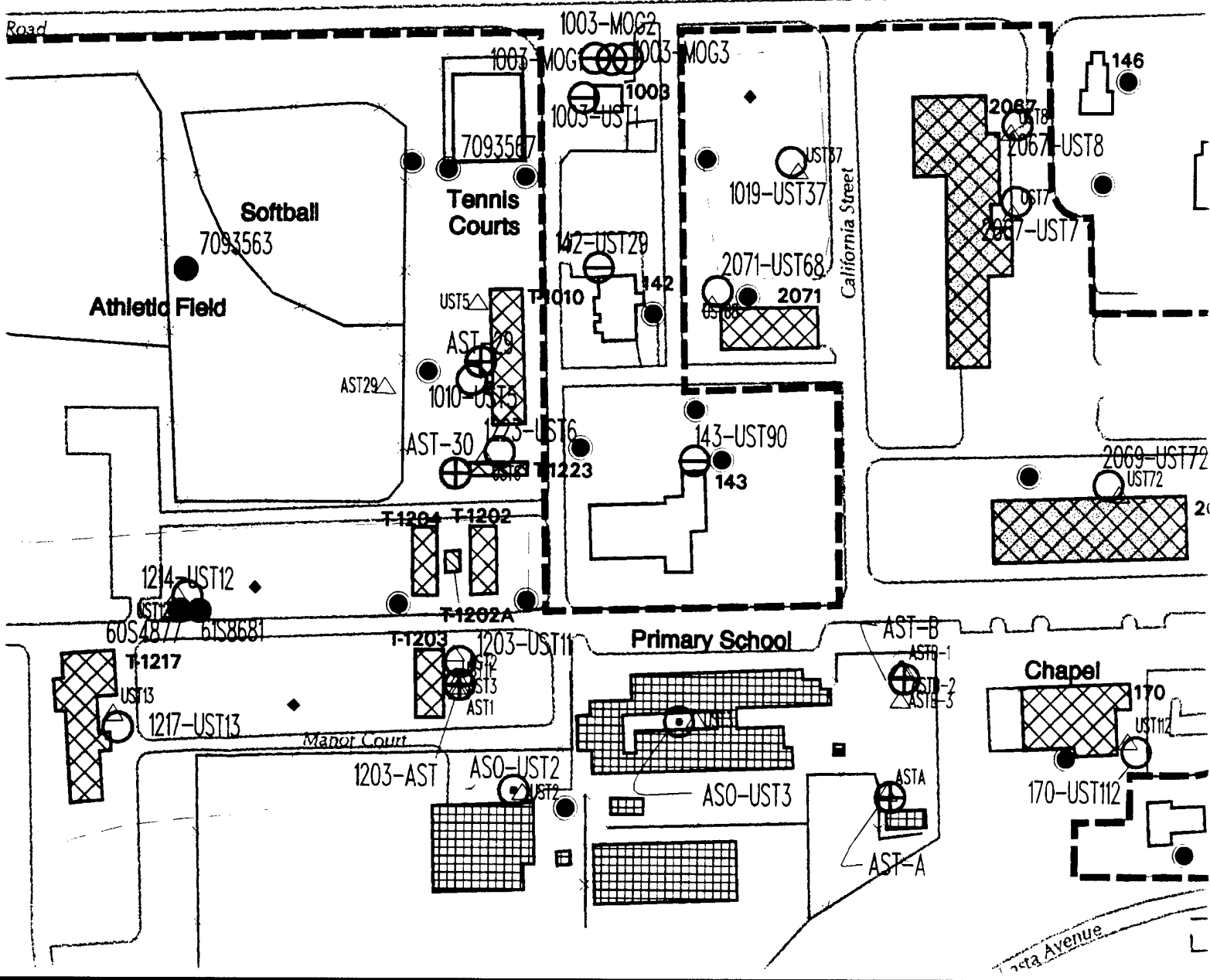
Benet Drive

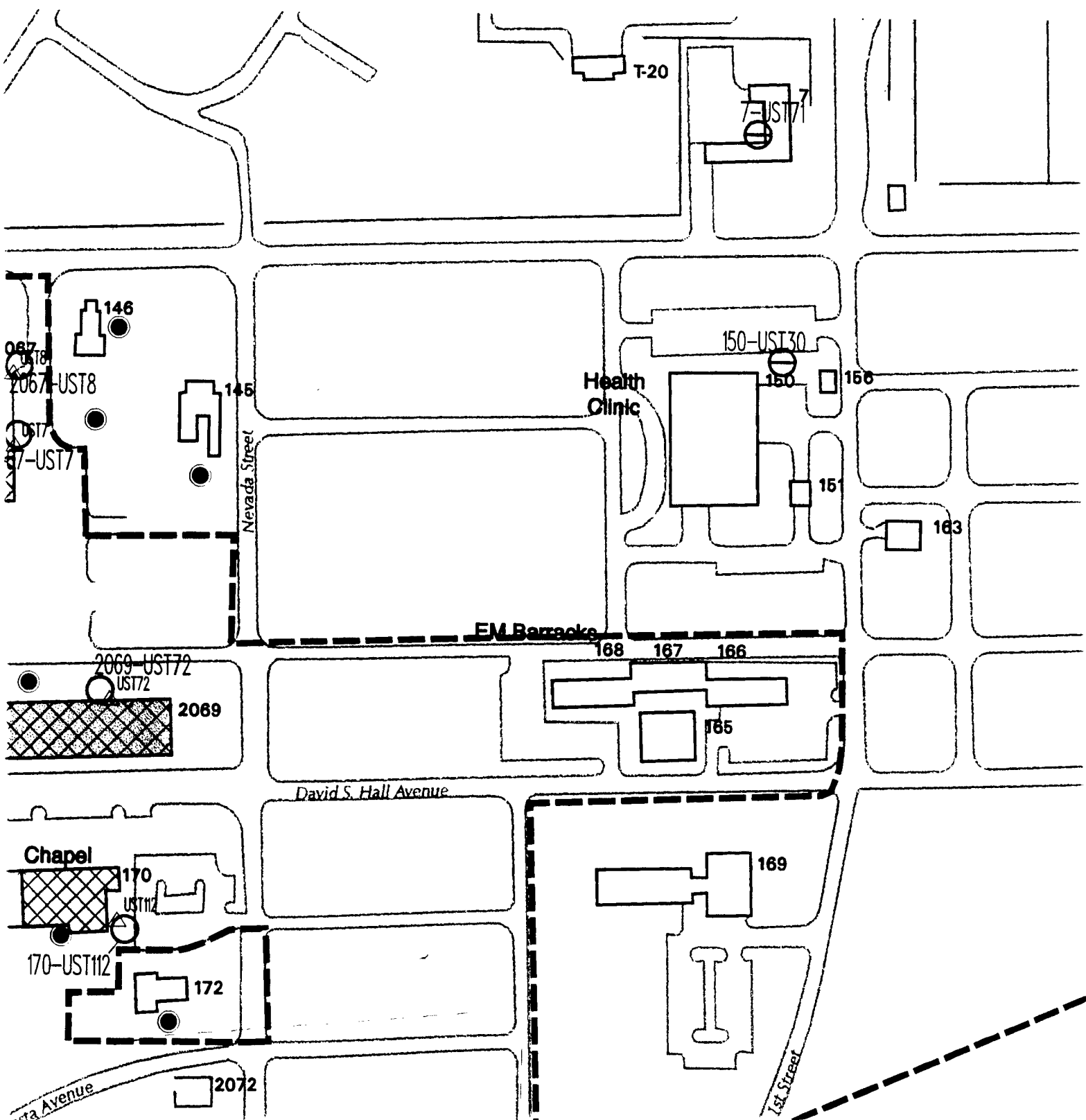
Woodsouth Drive

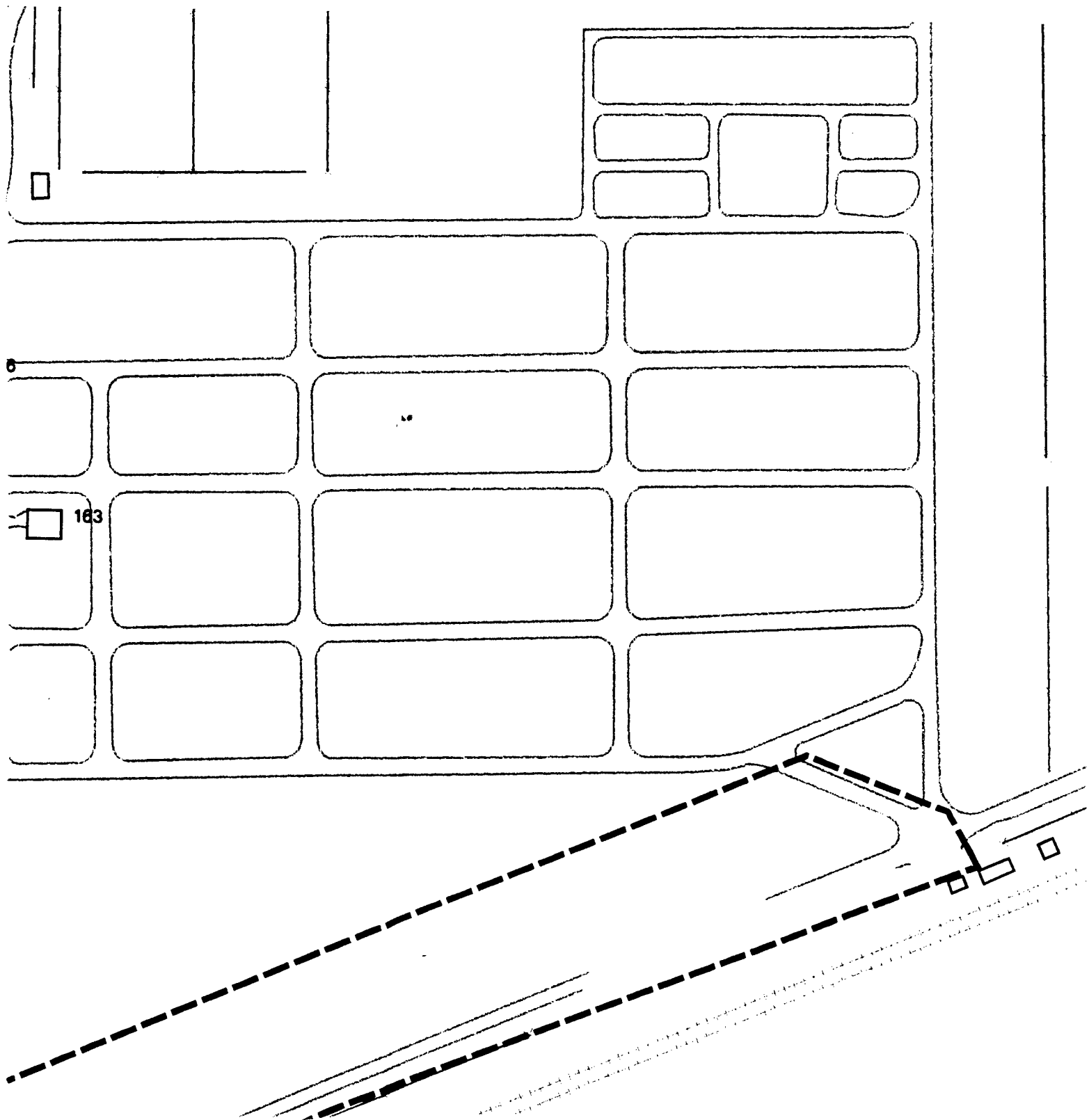
Flagler Boulevard

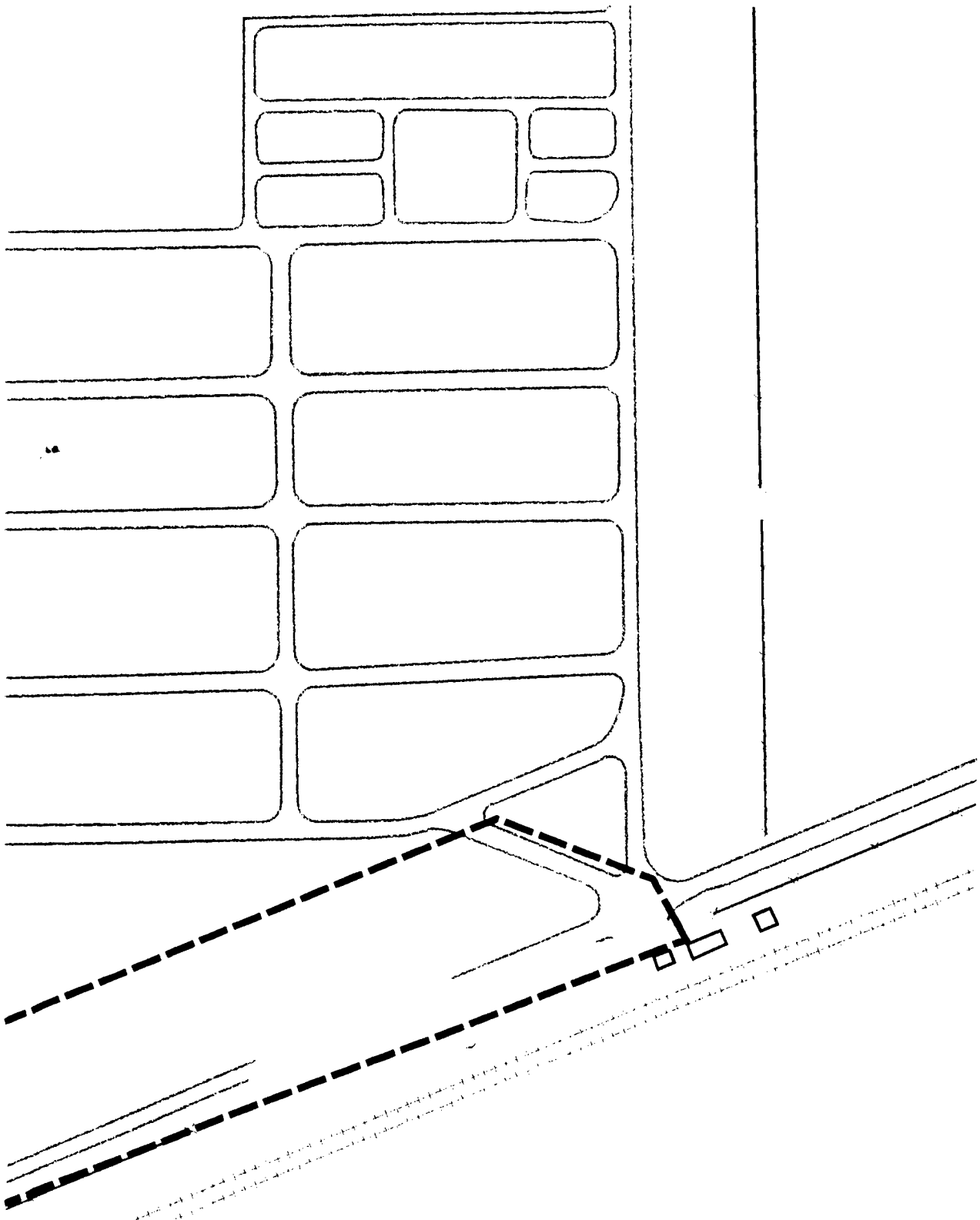


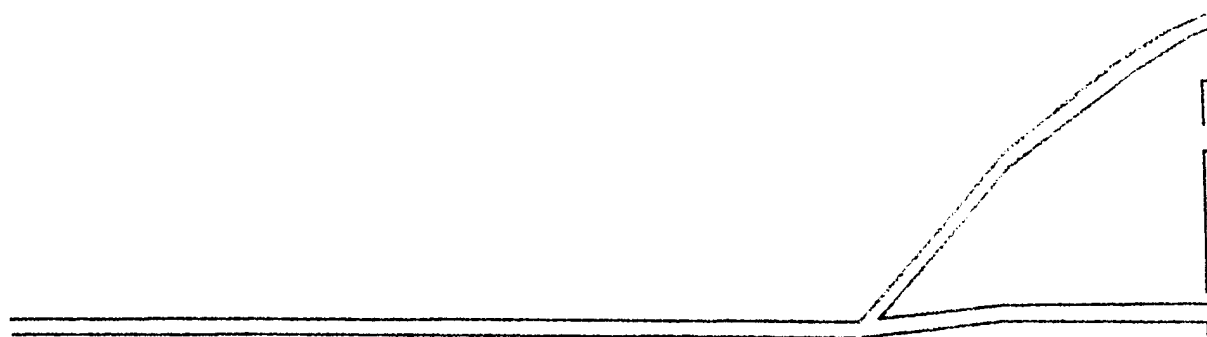
Gate 187



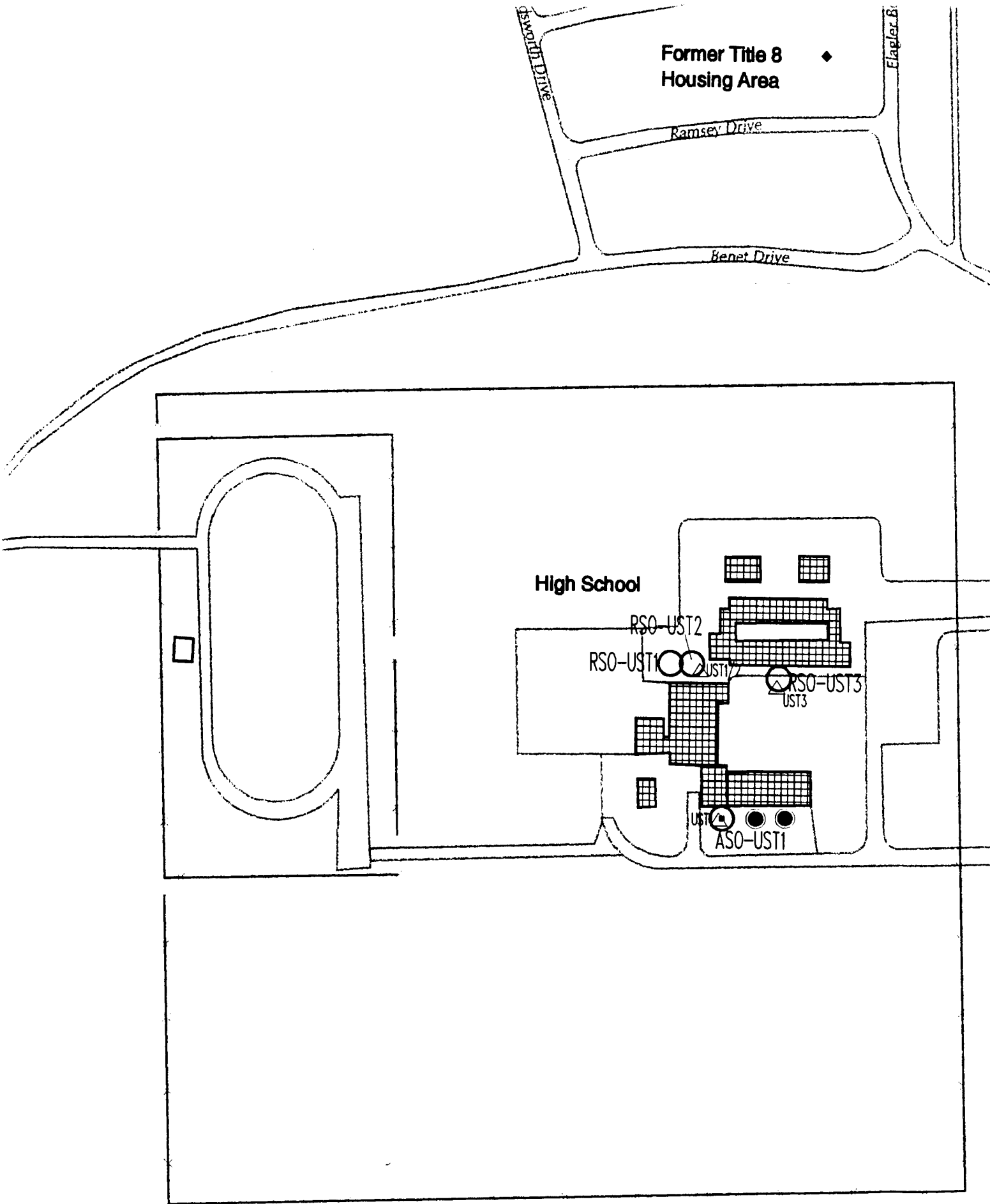




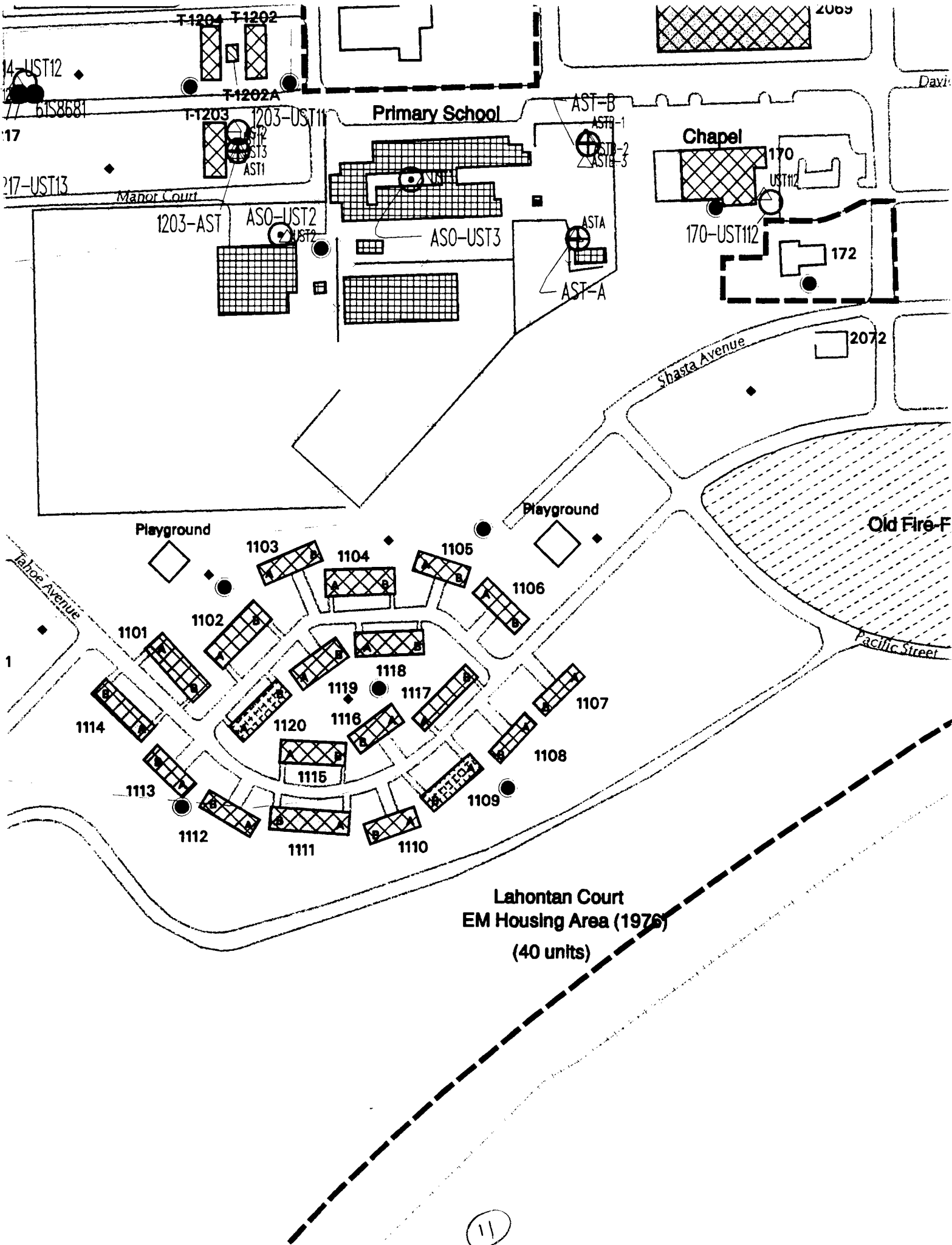


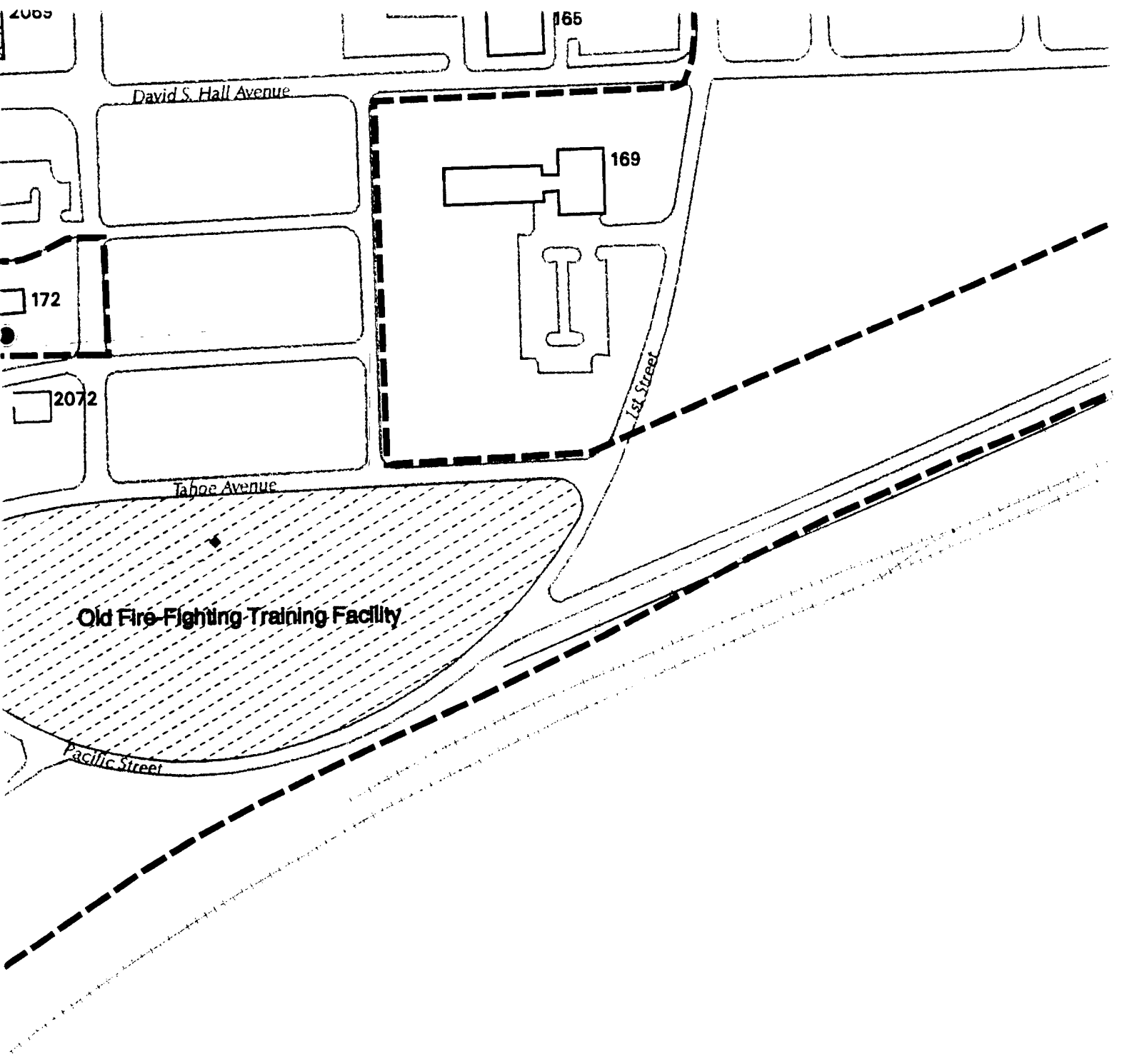


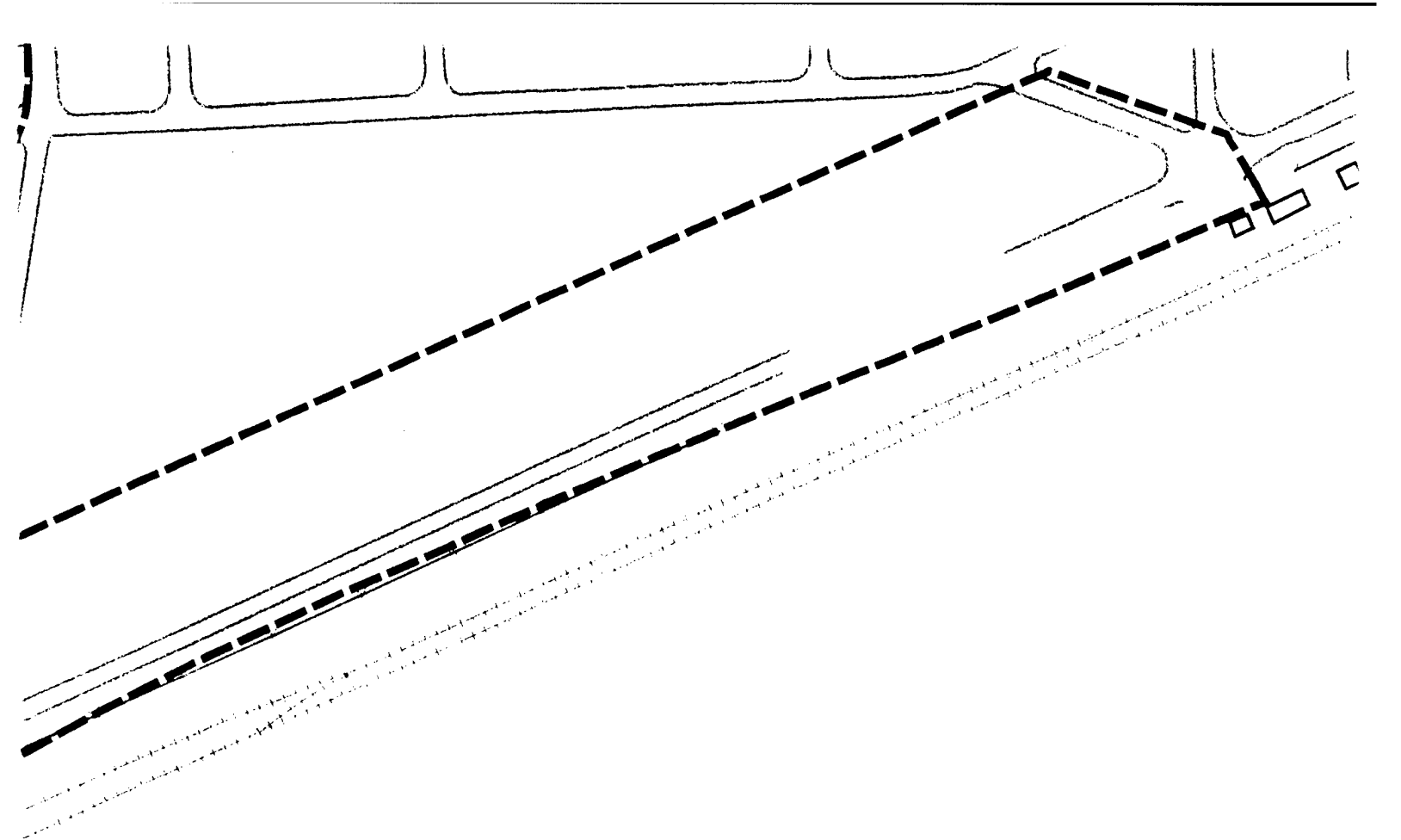
(8)

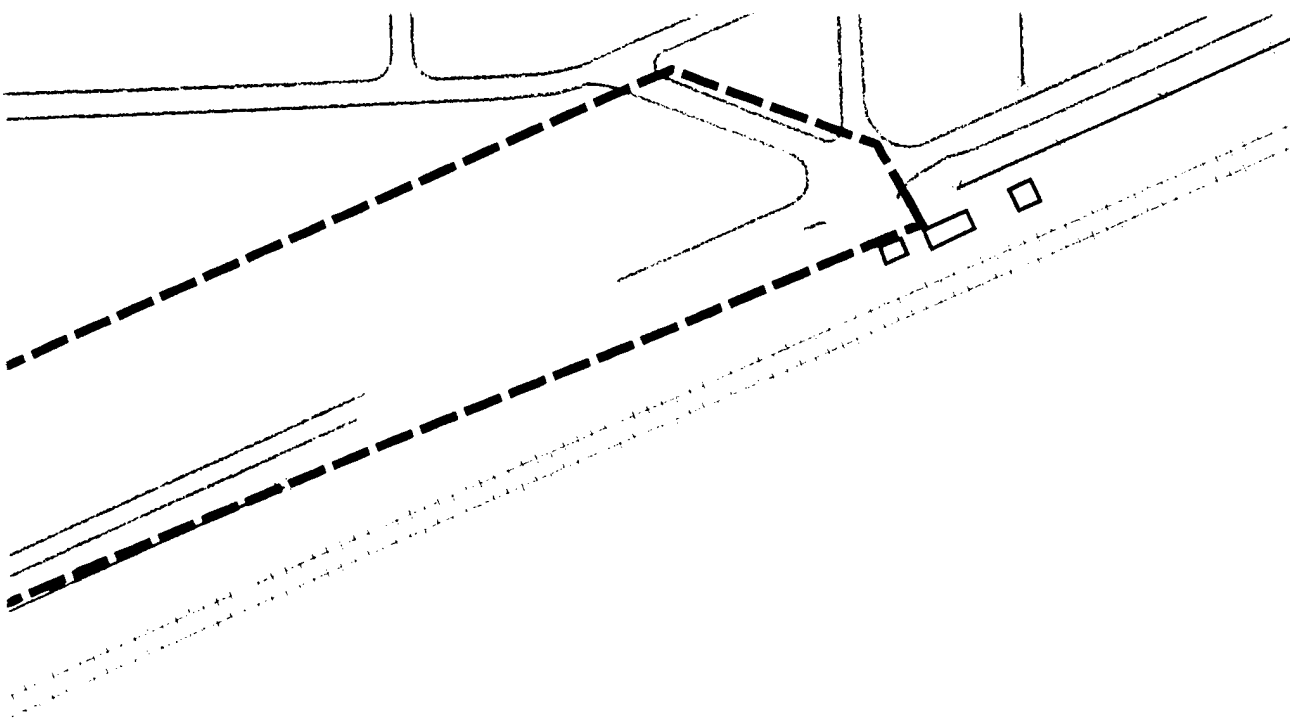


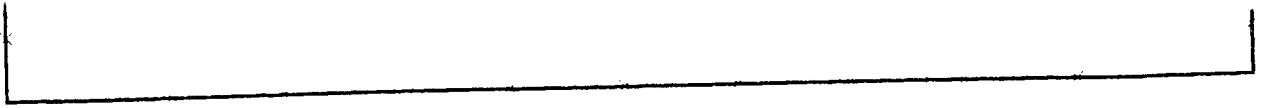
**Sierra Court
EM Housing Area (1987)
(80 Units)**

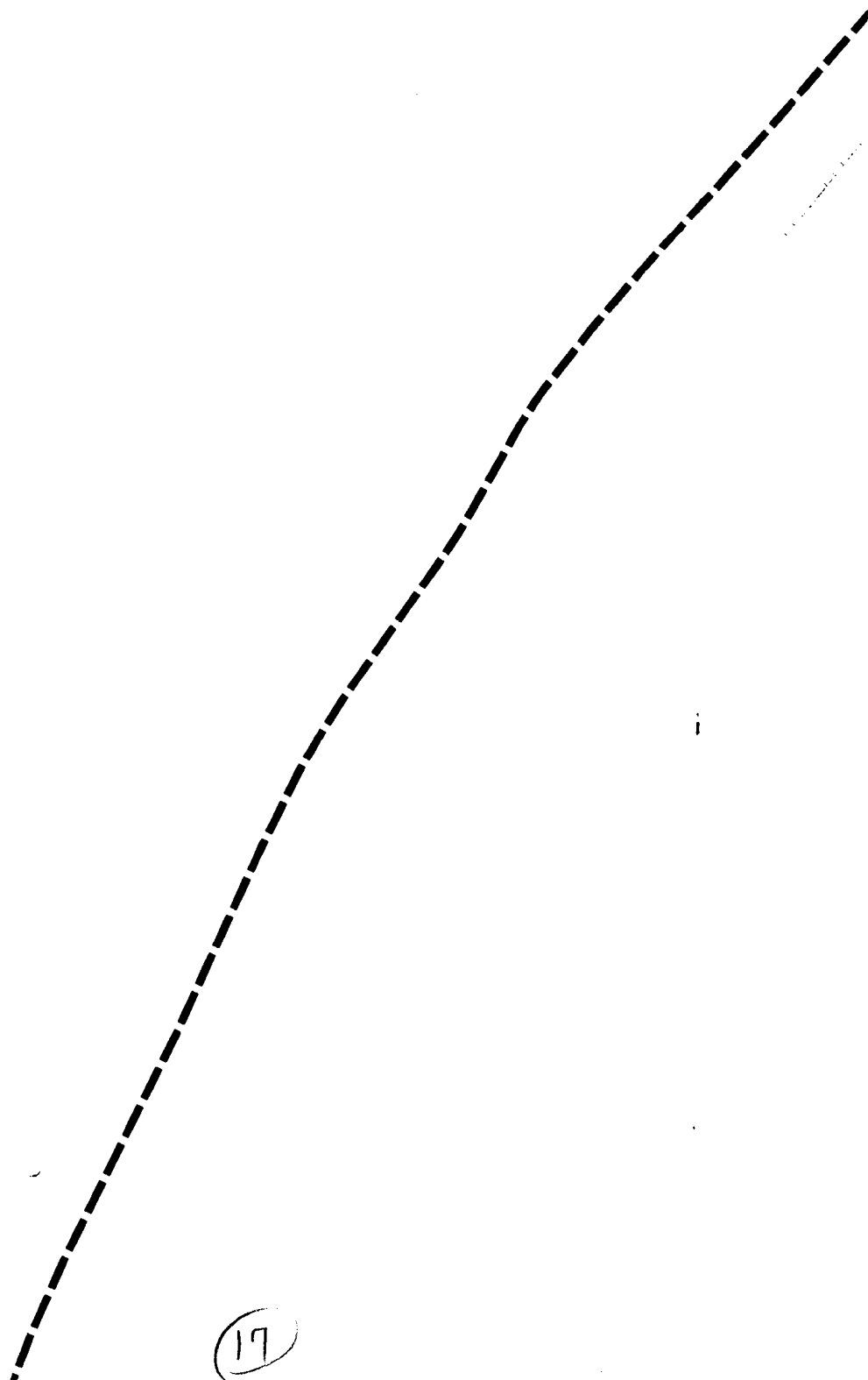




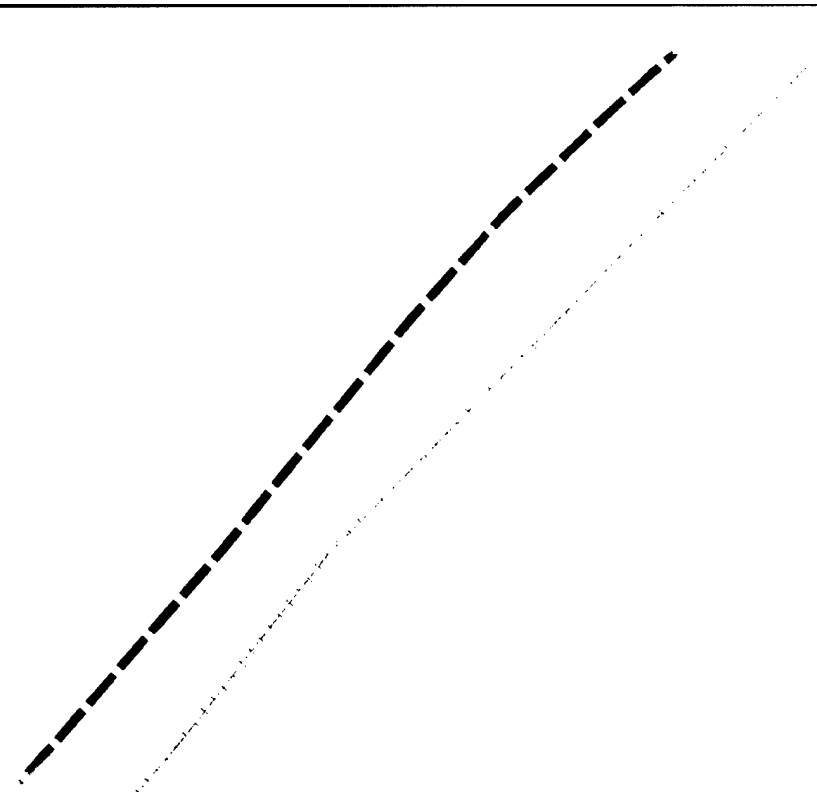


















17












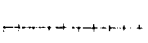



EXPLANATION

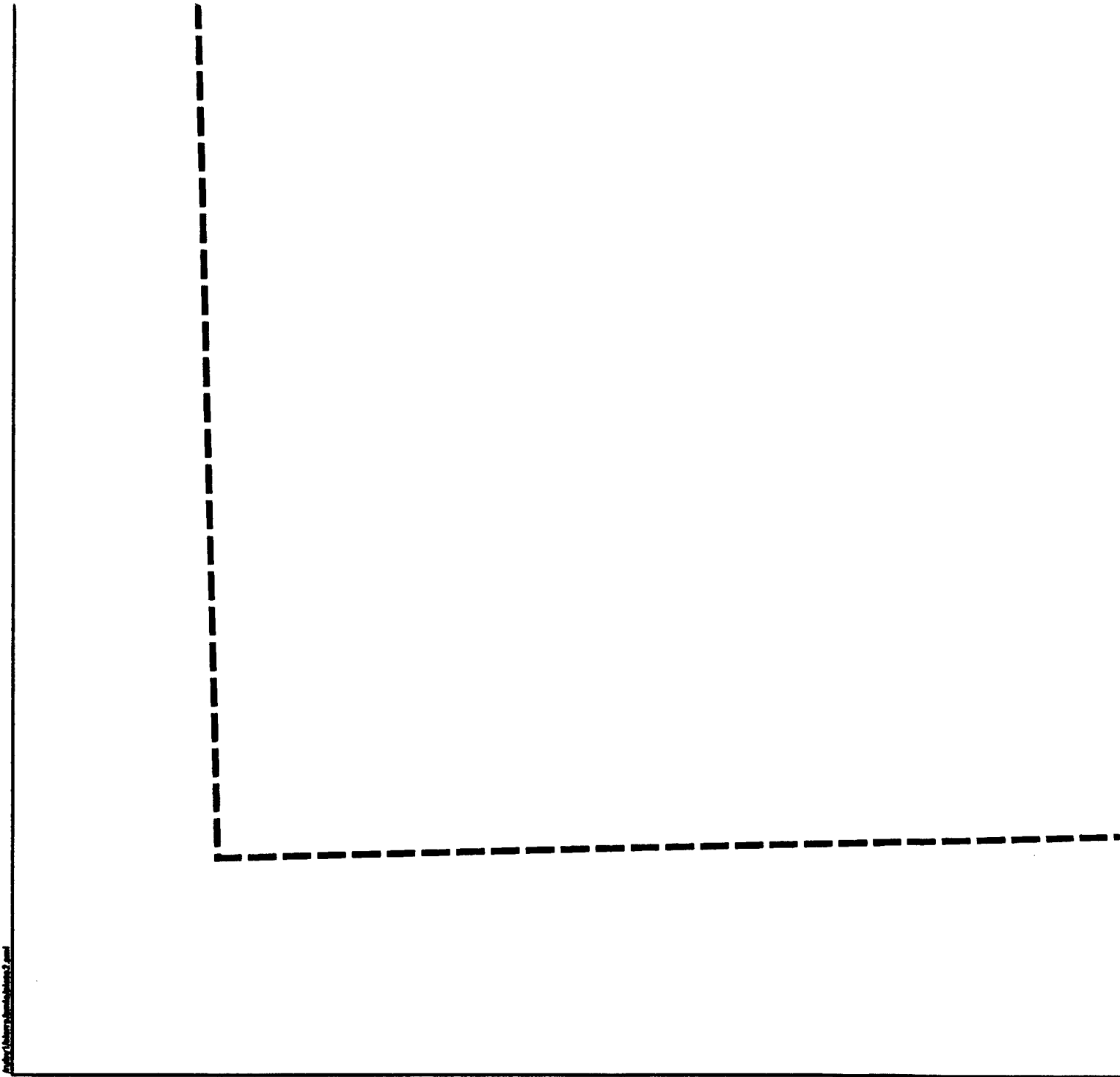
	ACM survey conducted; friable and non-friable ACM present
	No ACM survey conducted; non-friable ACM assumed present; friable ACM removed
	ACM survey conducted; friable and non-friable ACM detected; friable ACM removed
	No ACM survey; non-friable ACM assumed present; friable ACM assumed not present, based on construction date (1987)
	Potentially contains LBP because buildings were constructed before 1978
	LBP survey conducted; laboratory results indicated that doors, windows, and other miscellaneous surfaces did not contain lead as defined by Department of Occupational Safety and Health
	Assume buildings do not contain LBP because buildings were constructed after 1978
	State of California owned buildings
	Citizen Utilities Company owned building
	IRP site

EXPLANATION

A removed
I removed
not present,

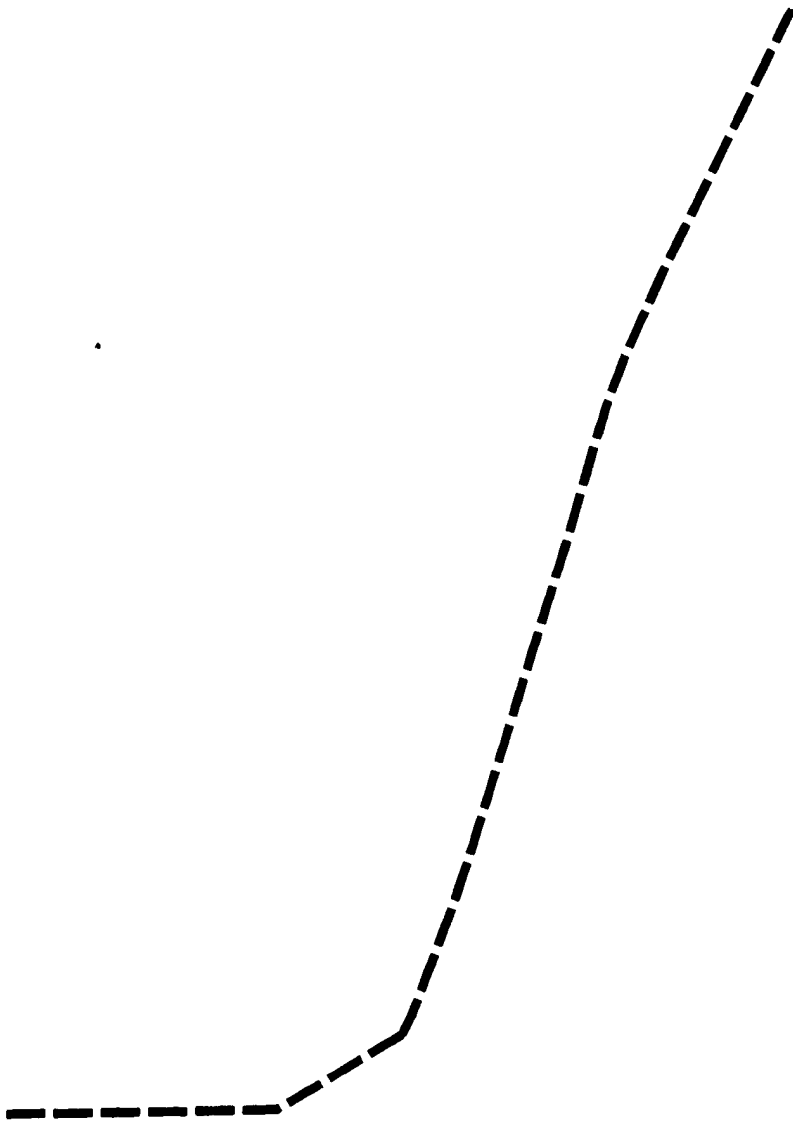
nd other miscellaneous
afety and Health
after 1978

-  Location of existing above ground storage tank (AST)
-  Location of existing underground storage tank (UST)
-  Location of underground storage tank abandoned in place
-  Location of removed underground storage tank
-  Potable water supply well
-  ACM/LBP soil sample location
-  AST/UST sample location
-  Buildings
-  Herlong reuse parcel boundary
-  Railroad
-  Roads
-  Fence
-  Former Structure Area
(per 1952 SIAD Irrigation Risers Map)



2025-01-01 10:00:00



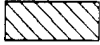




Potentially contains LBP because buildings were constructed before 1978



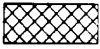
LBP survey conducted; laboratory results indicated that doors, windows, and other miscellaneous surfaces did not contain lead as defined by Department of Occupational Safety and Health



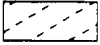
Assume buildings do not contain LBP because buildings were constructed after 1978



State of California owned buildings



Citizen Utilities Company owned building



IRP site

158681



Known existing polychlorinated biphenyl (PCB) containing transformers (Refer to Table 8 regarding levels of PCB-containing oils in each individual transformer). Serial numbers are shown adjacent to transformer locations






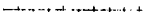



Known transformers within the Herlong parcel. Levels of PCB-Containing fluids were tested in each individual transformer and found to be below 5 ppm.



Location of removed PCB containing transformer. Serial numbers are shown adjacent to former transformer location.

Note: Property boundaries indicated are approximate and are not intended to represent the legal description of the parcel(s).
The extent of environmental issues on this plate are limited to buildings and areas on the Herlong parcel except for PCB transformer and tank locations

nd other miscellaneous
afety and Health
after 1978

-  AST/UST sample location
-  Buildings
-  Herlong reuse parcel boundary
-  Railroad
-  Roads
-  Fence
-  Former Structure Area
(per 1952 SIAD Irrigation Risers Map)

refer to Table 8
al

uids



l areas

Source: Sierra Army Depot, Environmental Management Division

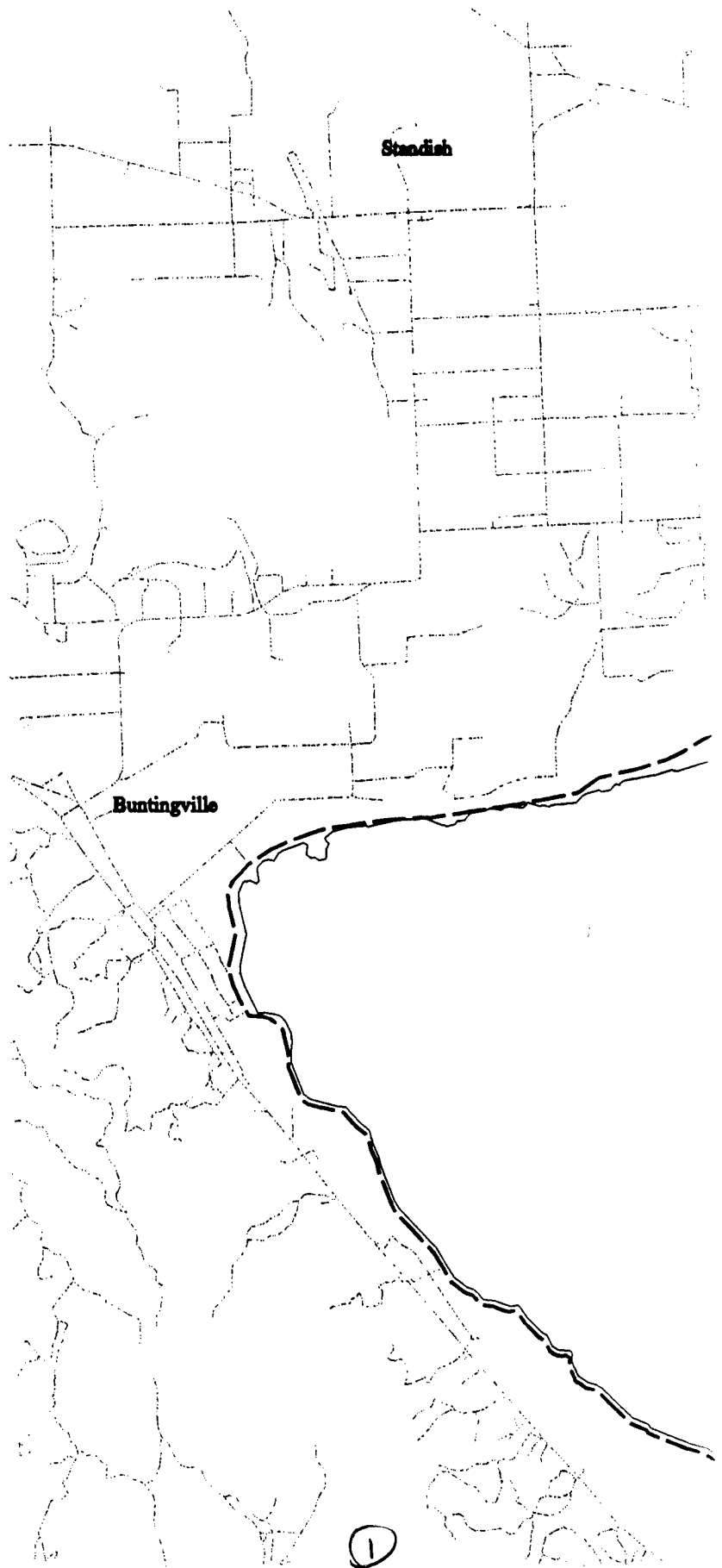


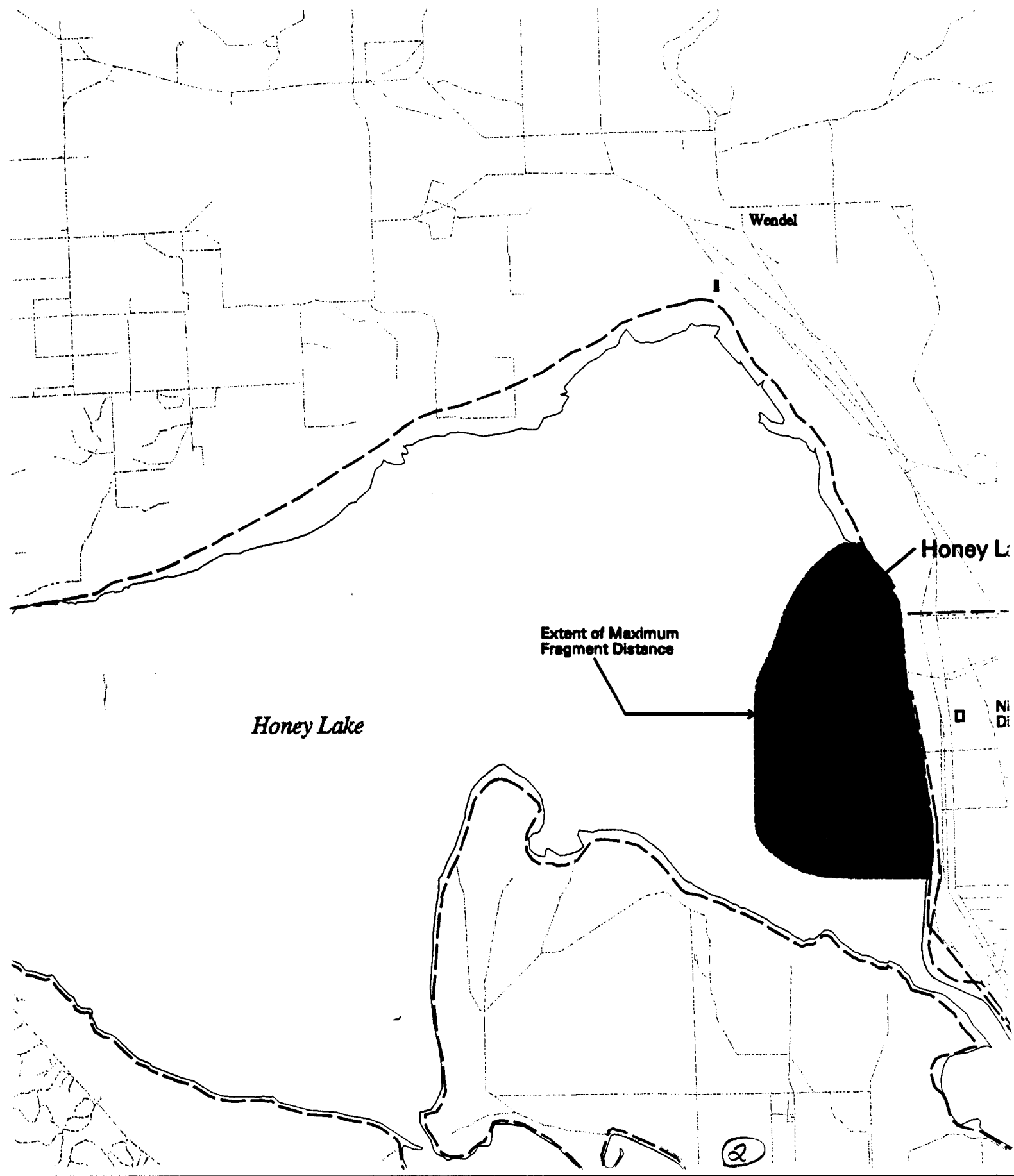
Harding Lawson Associates
Engineering and
Environmental Services

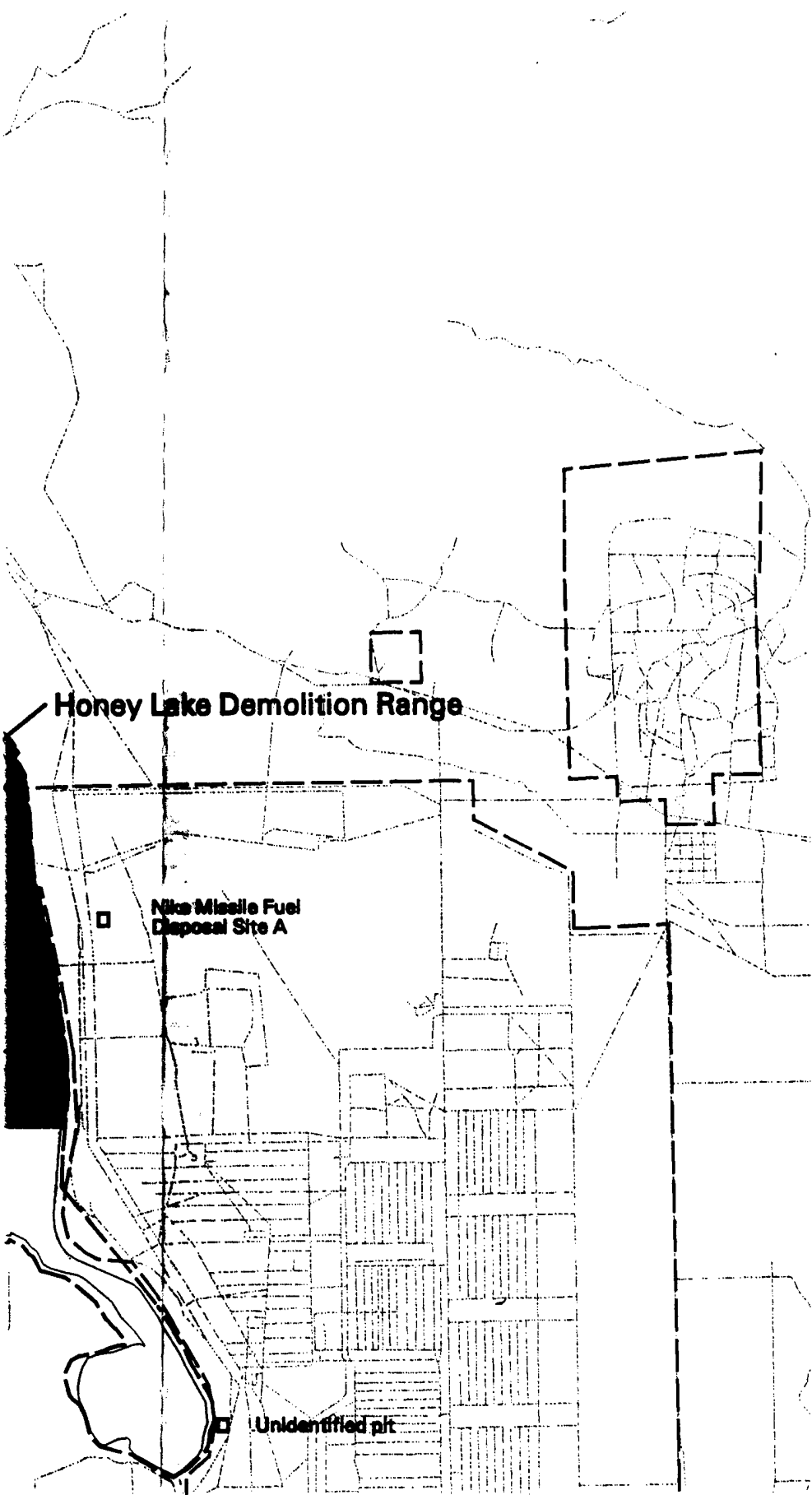
Herlong Reuse Parcel
Sierra Army Depot
Environmental Baseline Survey
Lassen County, California

PLATE
2

DRAWN DBJ	JOB NUMBER 32100 11.05.00	APPROVED	DATE 4/28/96	REVISED DATE 02/20/97
--------------	------------------------------	----------	-----------------	--------------------------



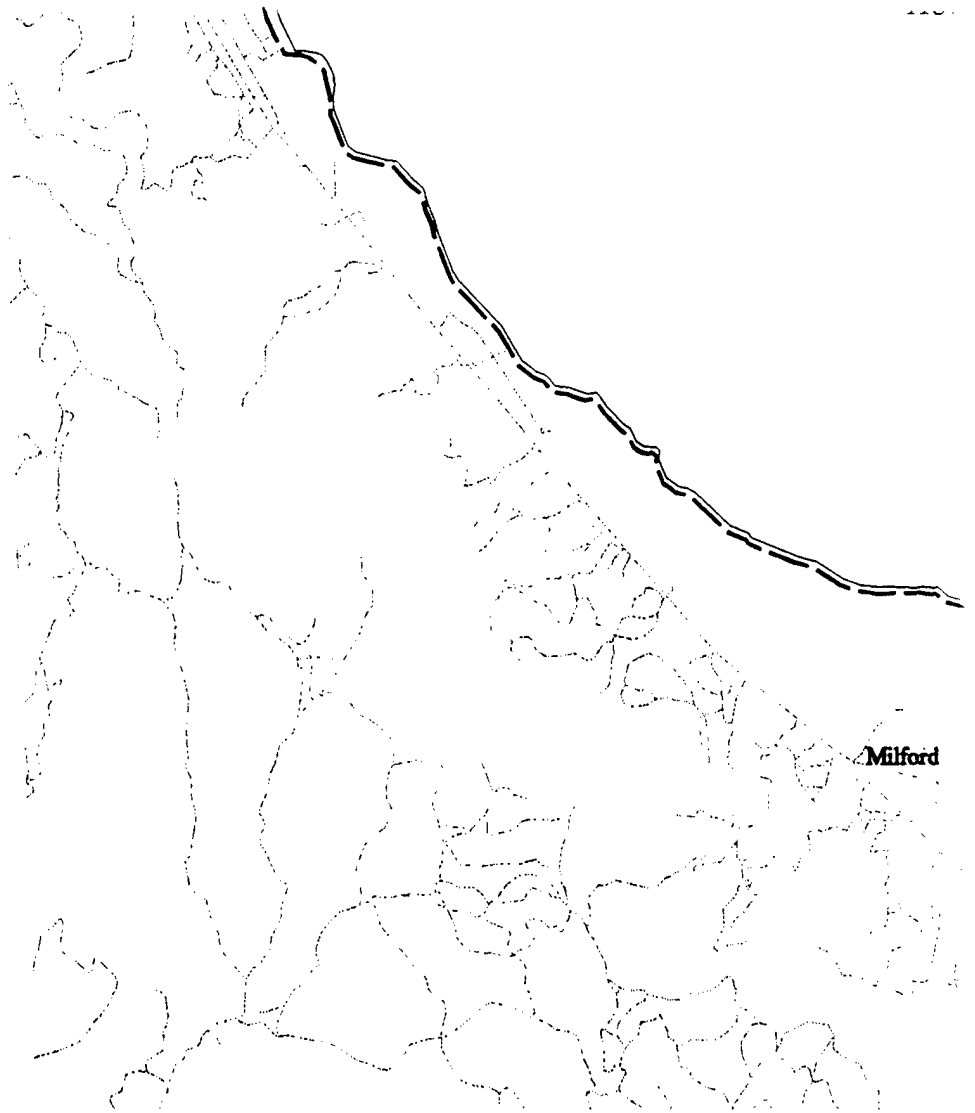







Honey Lake Demolition Range





**Nike Missile Fuel
Disposal Site A**

Unidentified pit

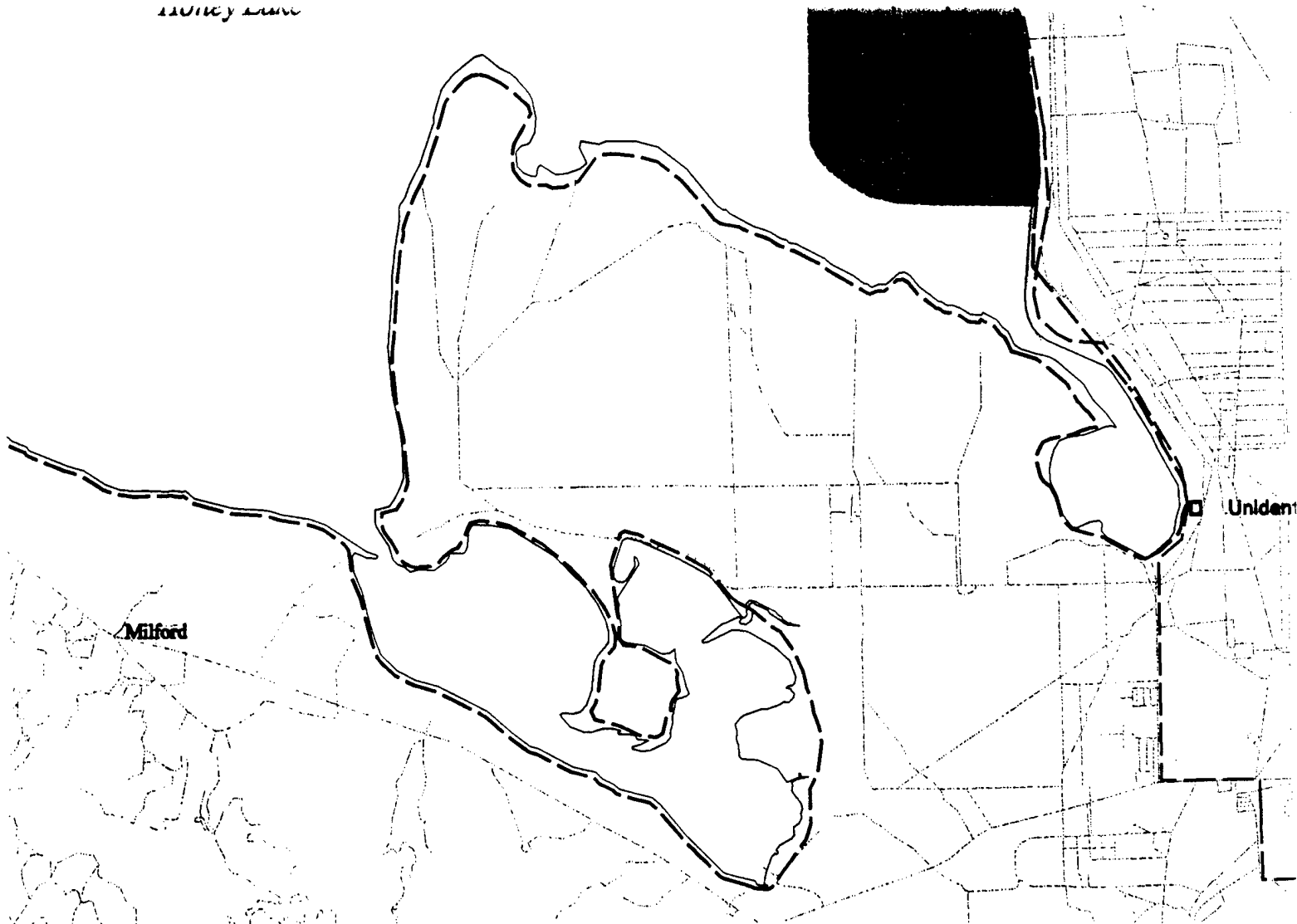


EXPLANATION

-  Potential ordnance and explosives (OE) location (Archives Search Report (COE-RI, 1996))
-  IRP site within one mile of the Honey Lake parcel (HLA, 1994)
-  Approximate location of Southern Pacific Railroad tar pit

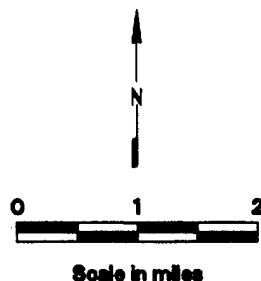
-  Honey Lake reuse parcel boundary
-  Approximate Honey Lake shore
-  Installation boundary
-  Roads

Note: Property boundaries indicated are approximate and are not intended to represent the legal description of the p:



l boundary
e shore

l description of the parcel(s).

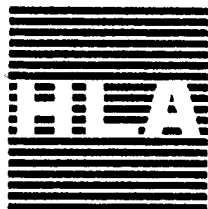


5

Disposal Site A

Unidentified pit

Source: Base map, parcel, shoreline, and property boundaries from
SIAD Environmental Management Division



Harding Lawson Associates
Engineering and
Environmental Services

Honey Lake Reuse Parcel
Sierra Army Depot
Environmental Baseline Survey
Lassen County, California

PLATE

3

DRAWN
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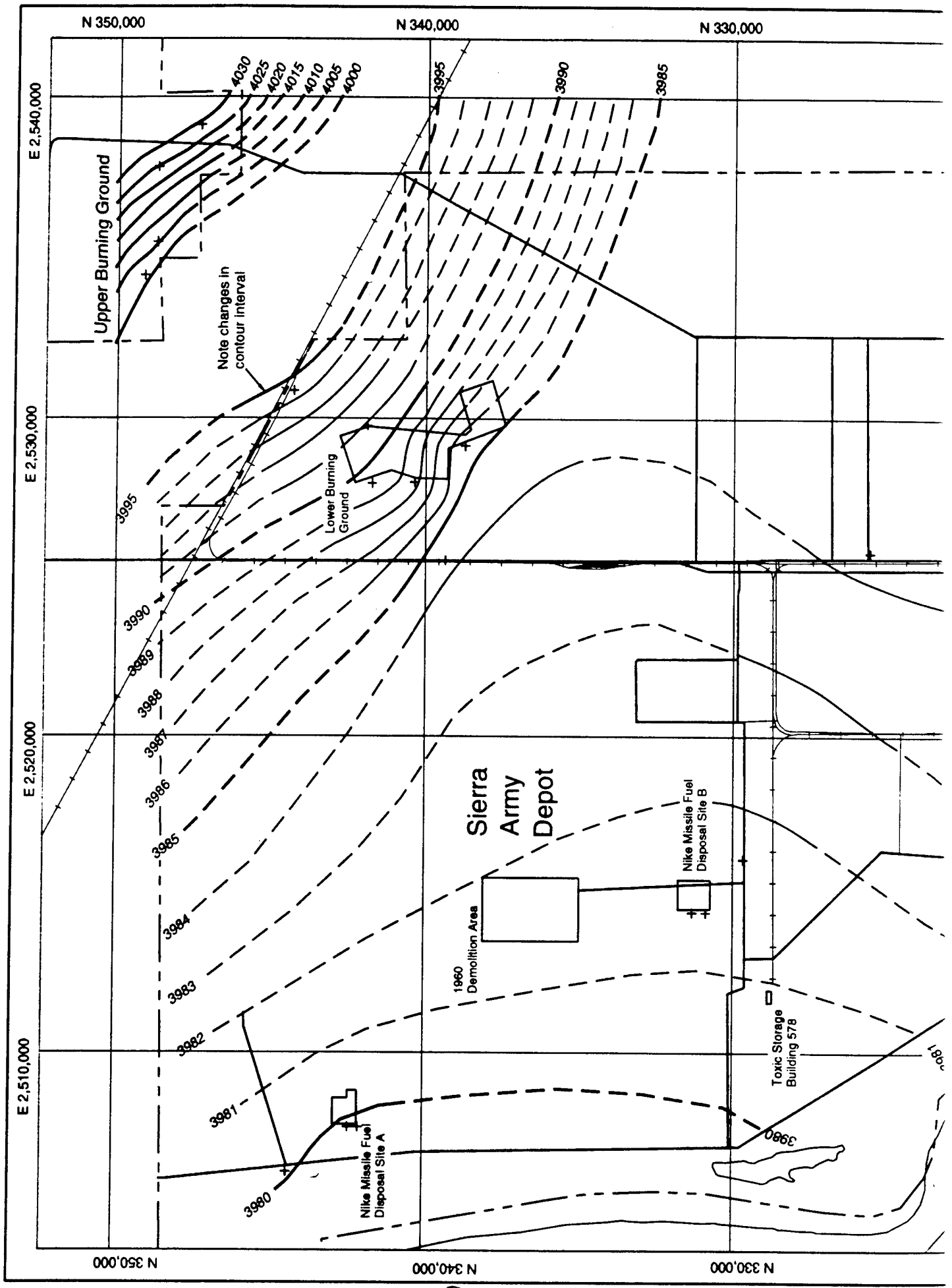
JOB NUMBER
32100 11.05.00

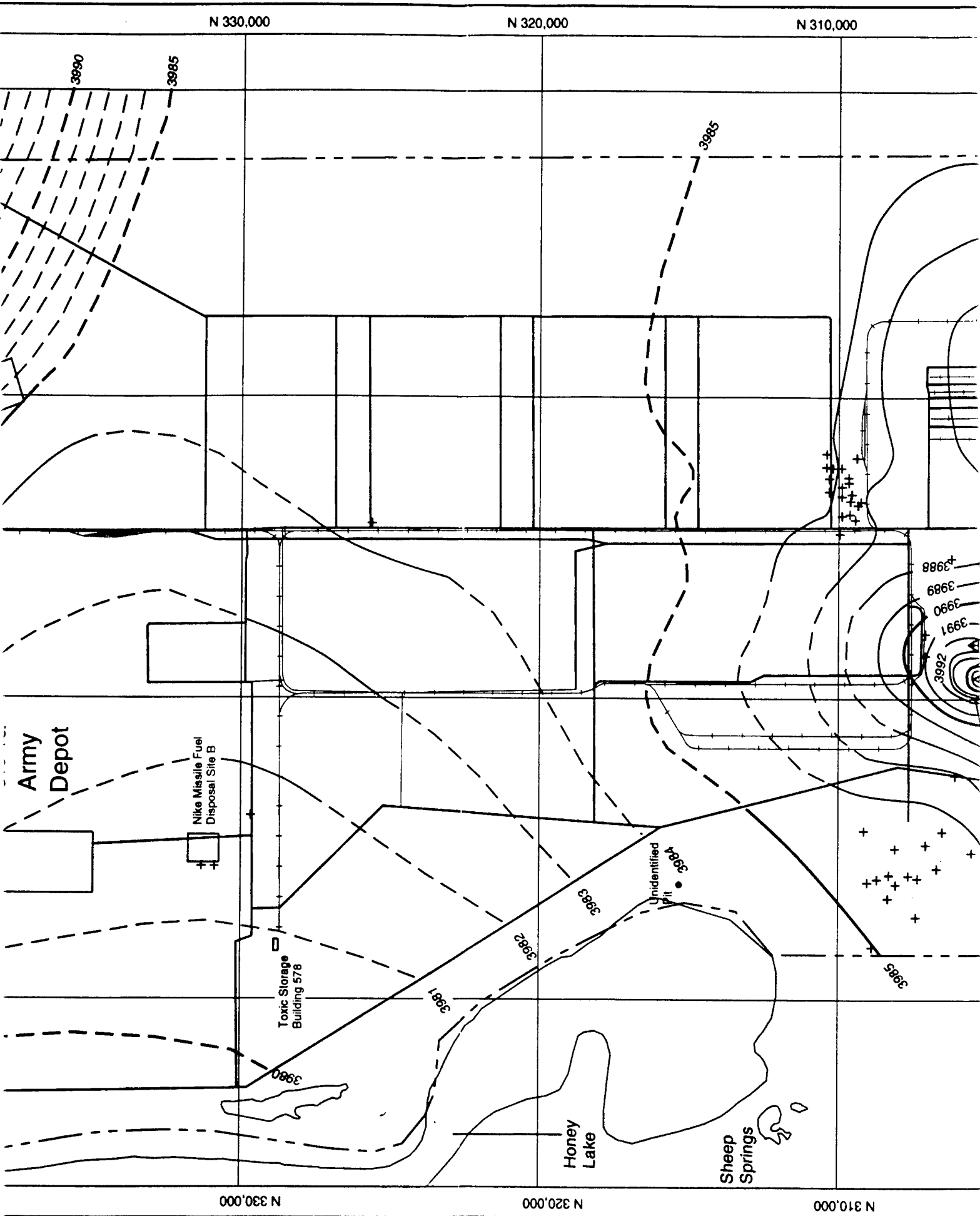
APPROVED

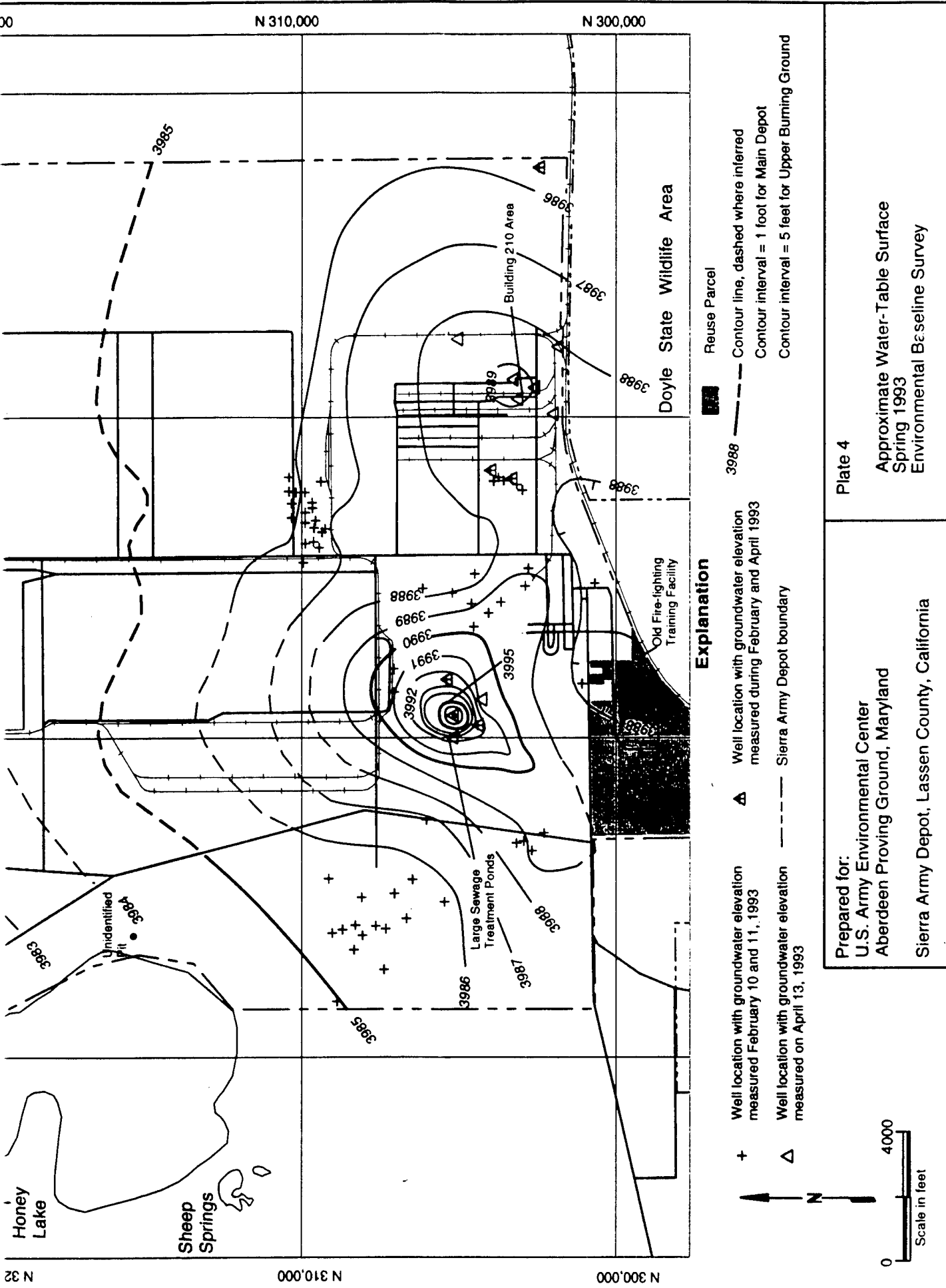
DATE
4/26/96

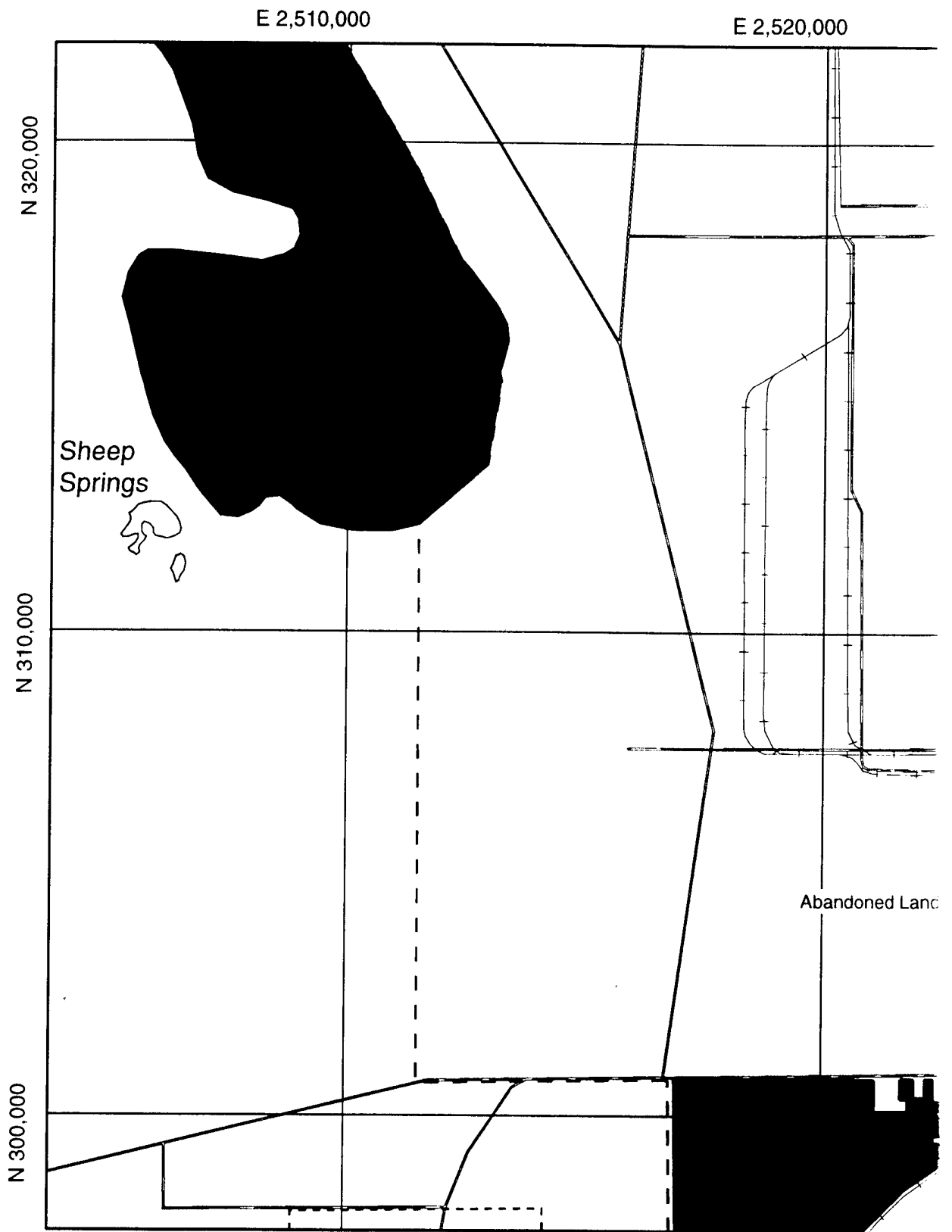
REVISED DATE
11/20/96

6












Explanation

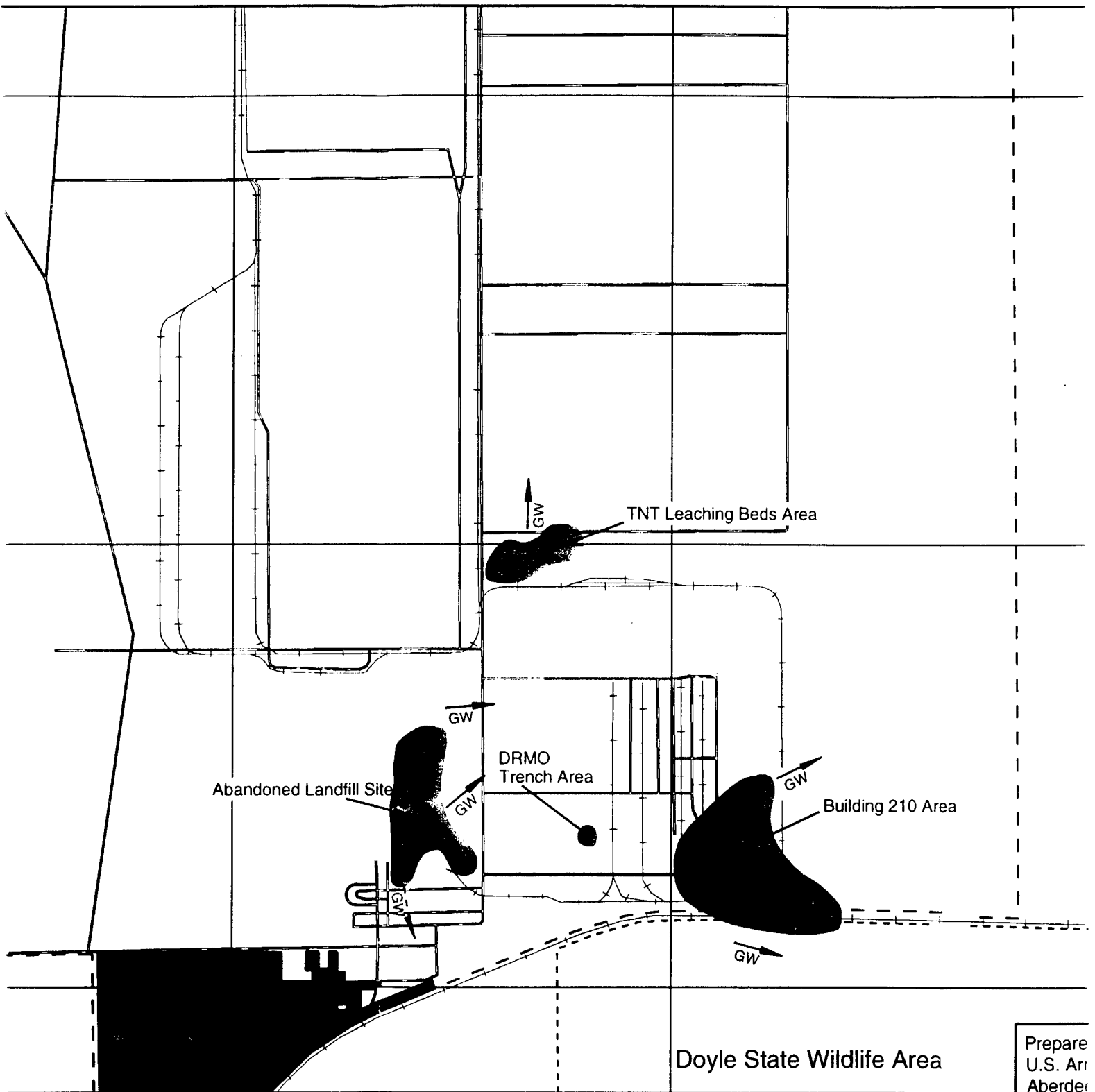
- Sierra Army Depot boundary
-  Approximate extent of TCE contaminant plume
-  Reuse Parcel
-  Groundwater Flow Direction (dashed where not field verified)

- Notes:
1. All idle Army De
 2. The co are the r to groun the TNT TCE and
 3. The sc the Aban

E 2,520,000

E 2,530,000

E 2,540



Explanation

my Depot boundary

ate extent of TCE
ant plume

ircel

ater Flow Direction
(where not field verified)

- Notes:
1. All identified groundwater contaminant plumes at Sierra Army Depot are shown on this plate.
 - 2 The contaminant plumes shown on this illustration are the result of Trichloroethene (TCE) migration to groundwater. The contaminant plume outline shown at the TNT Leaching Beds Area is a composite of TCE and trinitrobenzene contaminant plumes.
 3. The southwest extent of the contaminant plume at the Abandoned Landfill Site has not been fully delineated.

Prepare
U.S. Army
Aberdeen

Sierra A

Plate 1

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Env

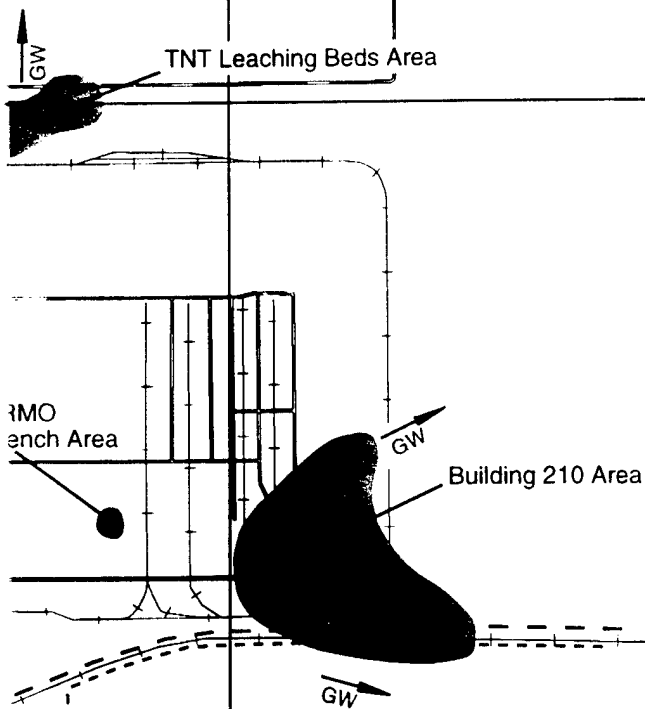
E 2,530,000

E 2,540,000

N 320,000

N 310,000

N 300,000



Doyle State Wildlife Area

Prepared for:
U.S. Army Environmental Center
Aberdeen Proving Ground, Maryland

Sierra Army Depot, Lassen County, California

Plate 5

Groundwater Contaminant Plumes
Identified at IRP Sites
Sierra Army Depot
Environmental Baseline Survey

inant plumes at Sierra
3.

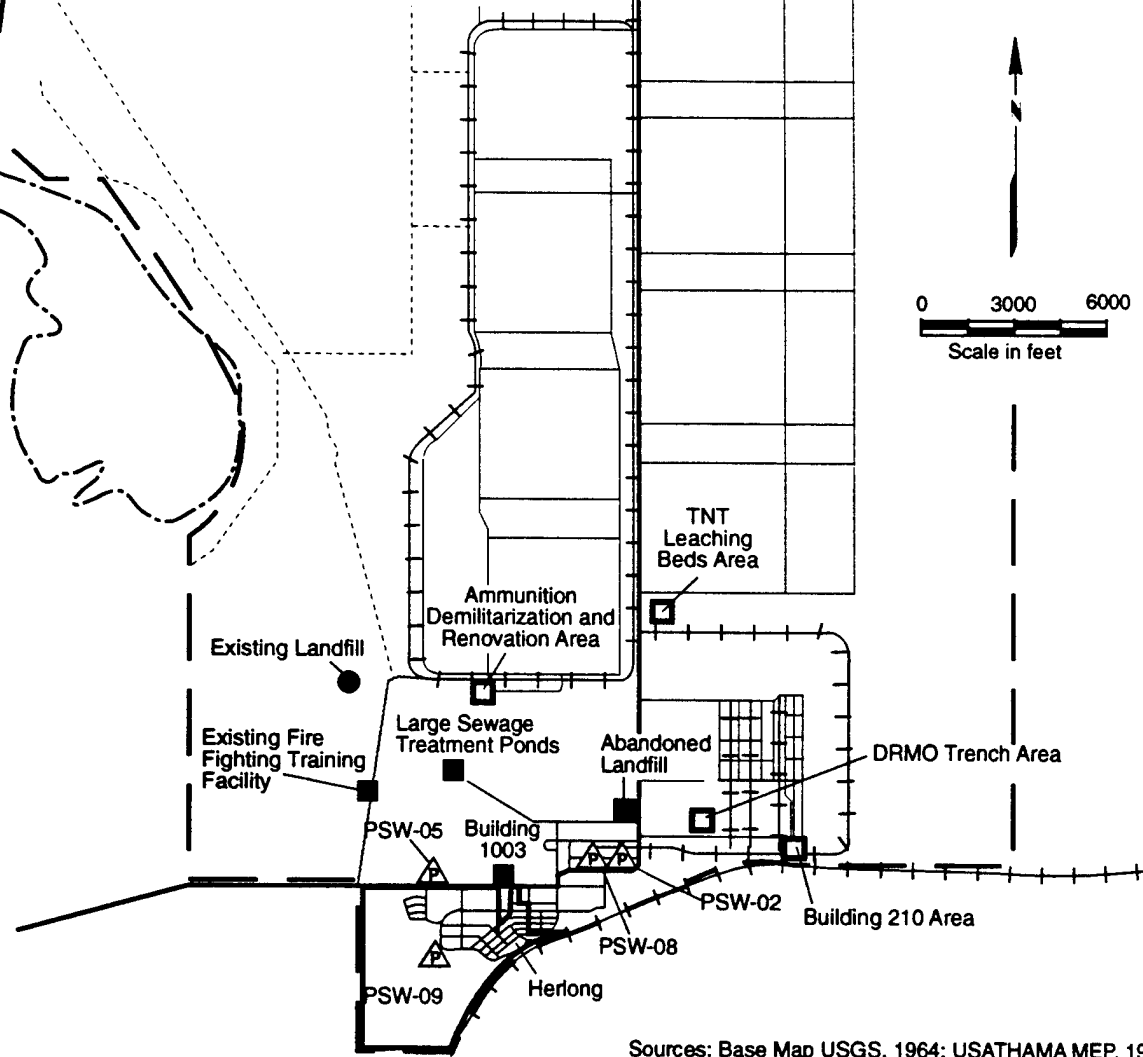
on this illustration
CE) migration
lume outline shown at
omposite of
int plumes.

aminant plume at
t been fully delineated.

Explanation

- Sierra Army Depot boundary
- Approximate boundary of Honey Lake
- IRP sites within 1 mile of the Herlong Reuse Parcel
- IRP sites between 1 mile and 2 miles from the Herlong Reuse Parcel
- CCR/RCRA site between 1 mile and 2 miles from the Herlong Reuse Parcel
- Potable supply well
- Railroad tracks
- Unpaved road
- Graded or paved road
- Herlong Reuse Parcel boundary

Honey Lake



Sources: Base Map USGS, 1964; USATHAMA MEP, 1988

Harding Lawson Associates
Engineering and
Environmental Services

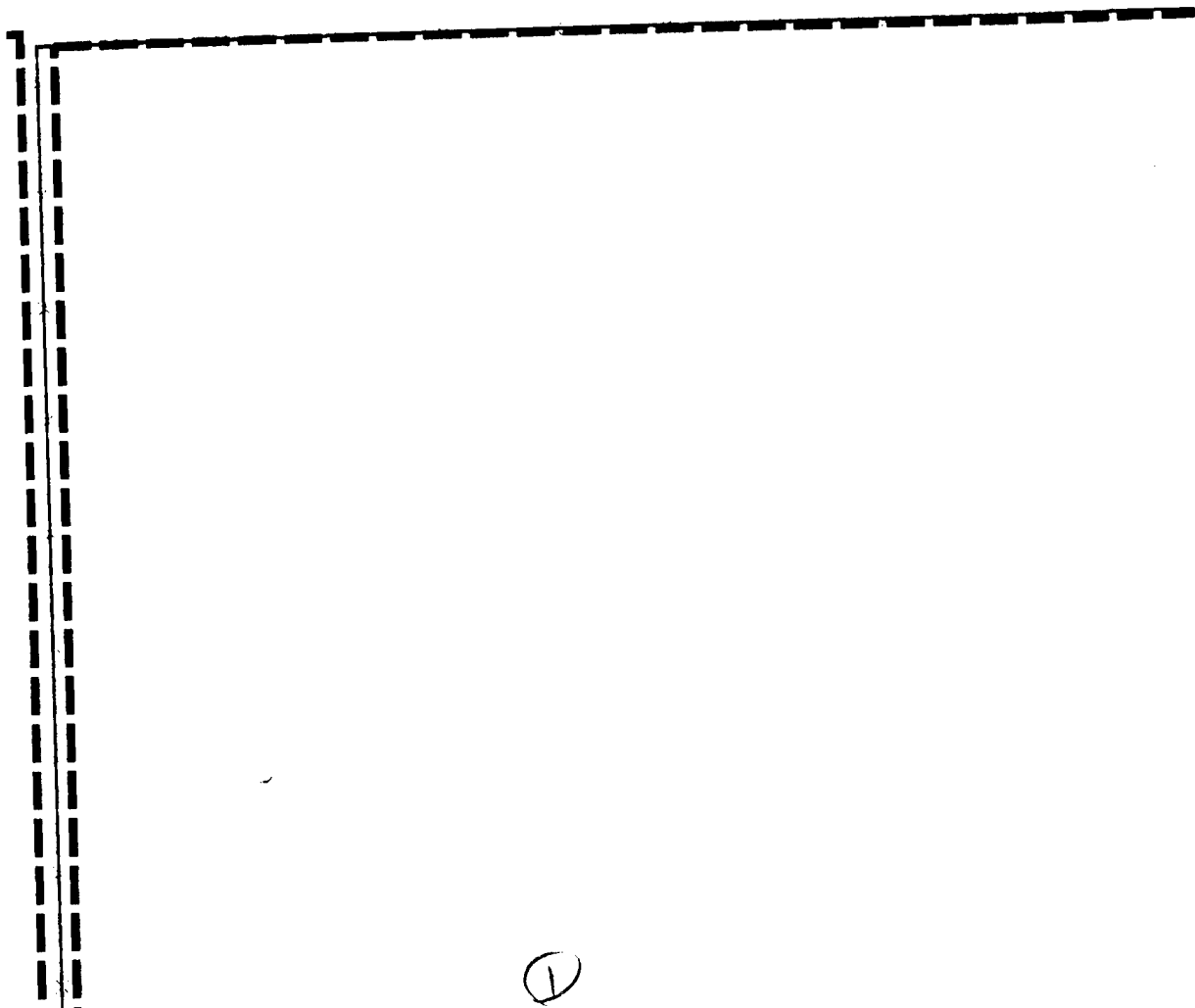
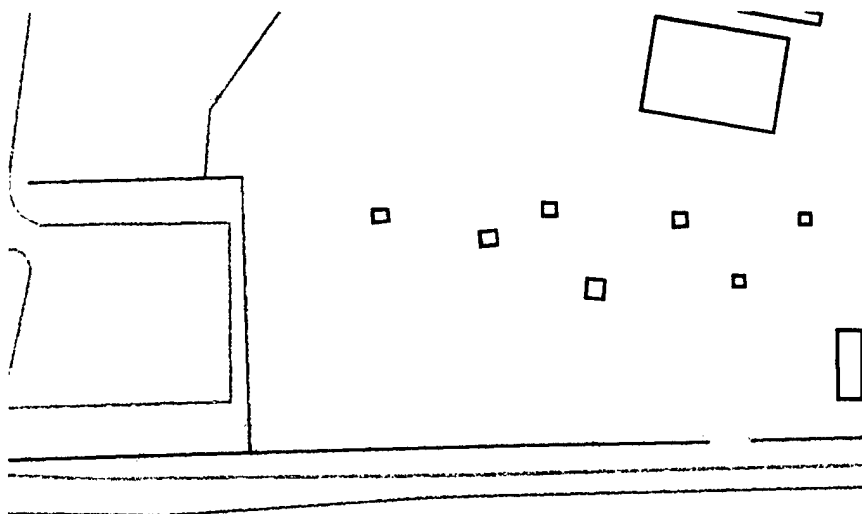


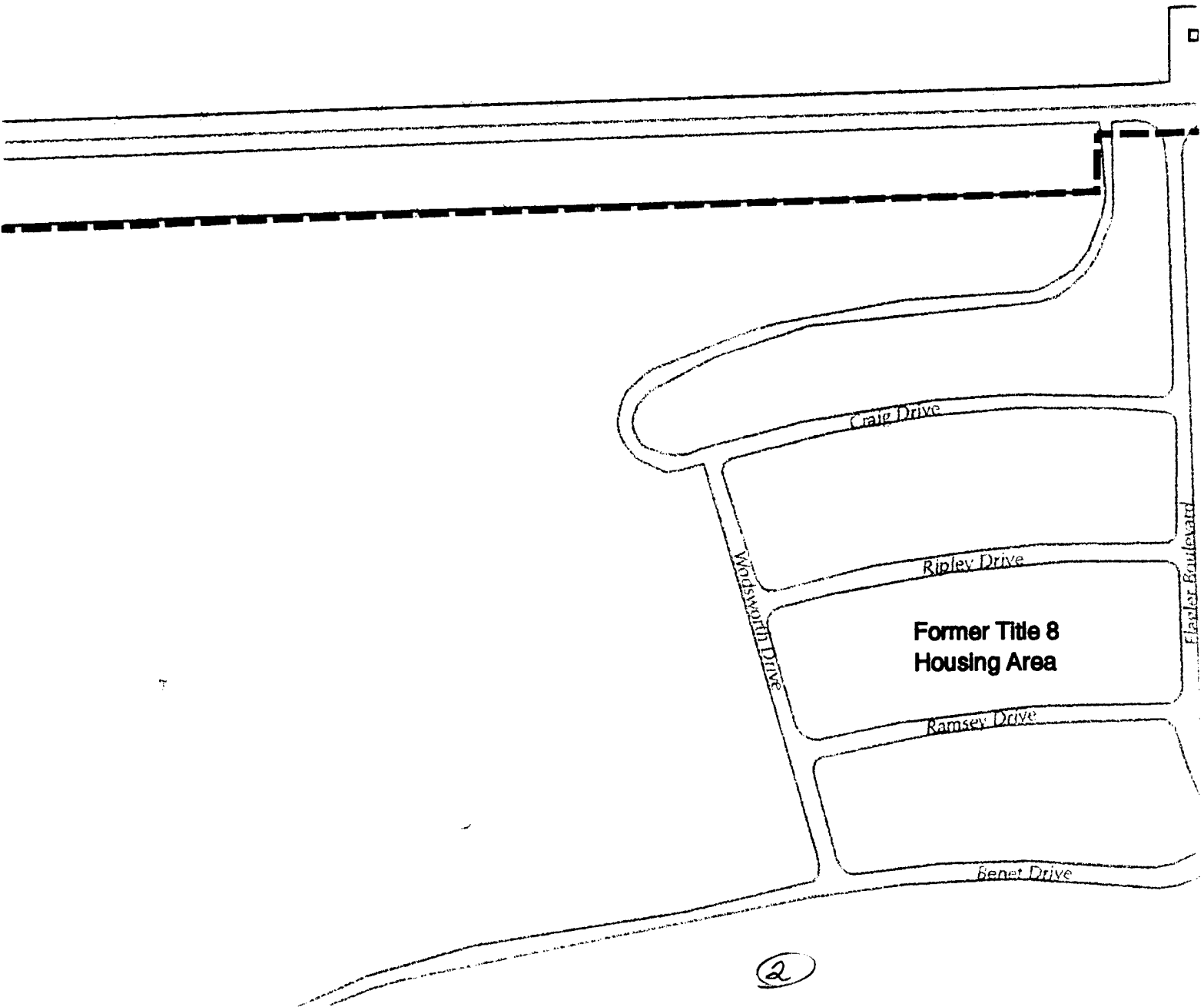
Prepared for:
U.S. Army Environmental Center
Aberdeen Proving Ground, Maryland

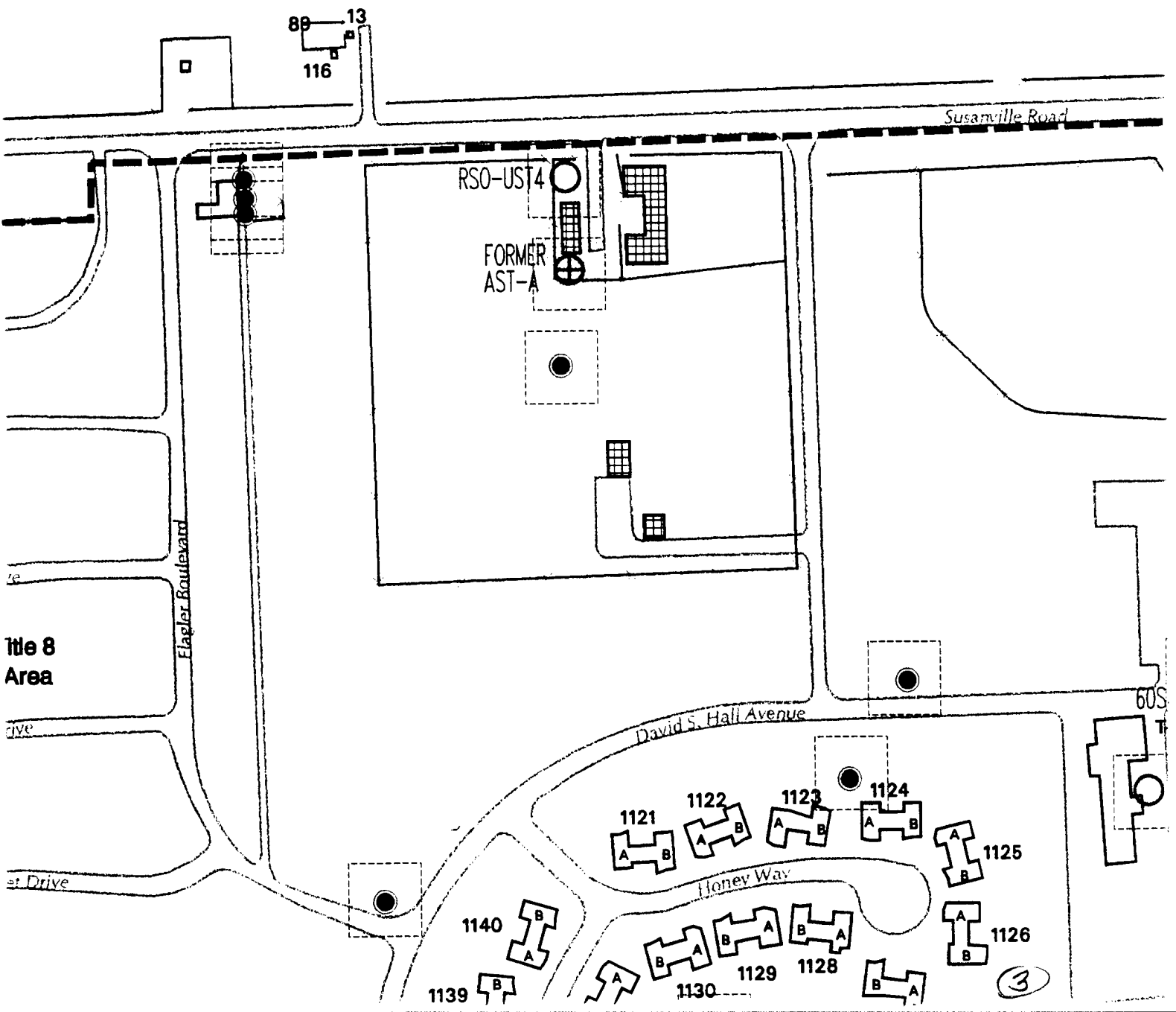
Sierra Army Depot, Lassen County, California

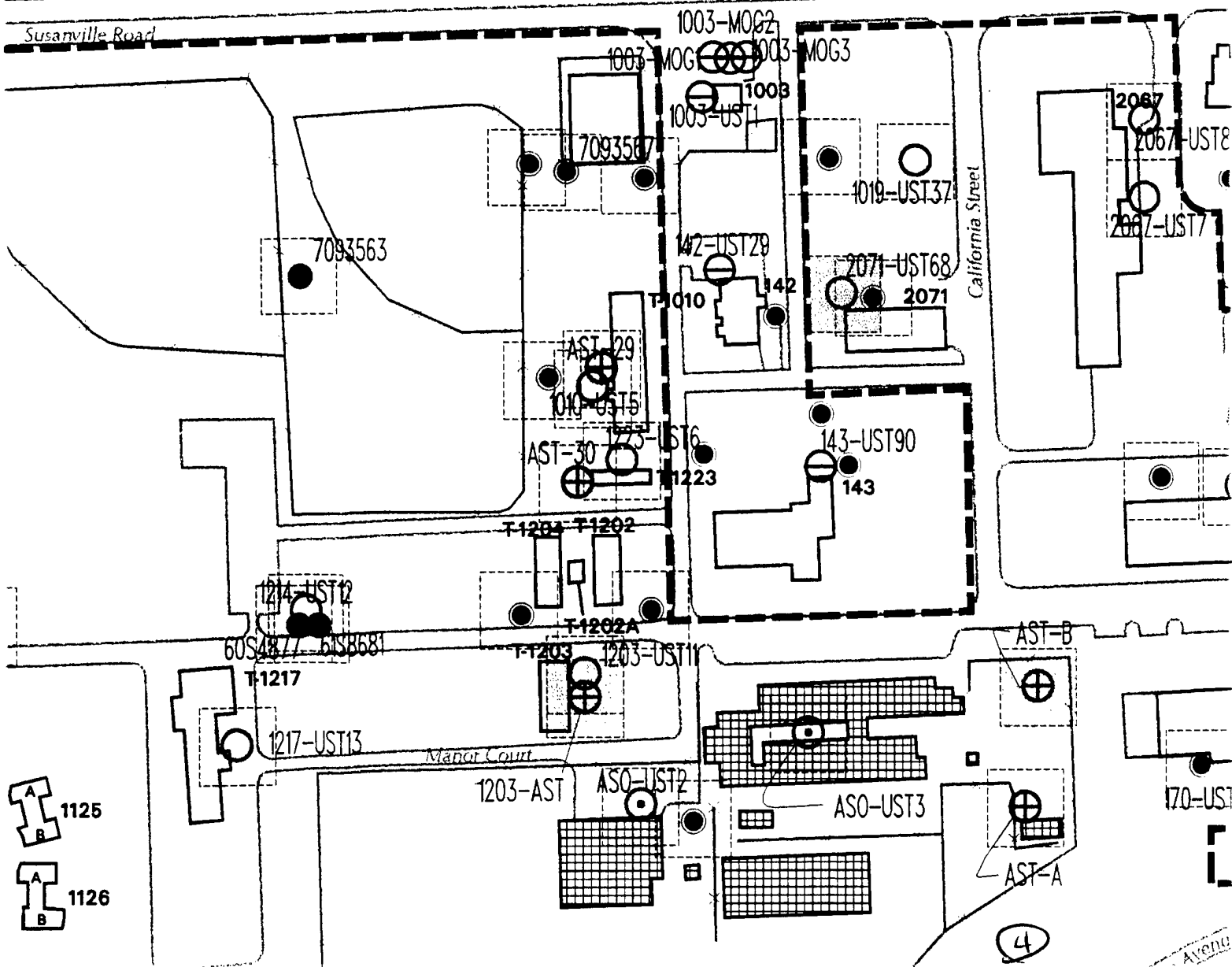
Plate 6

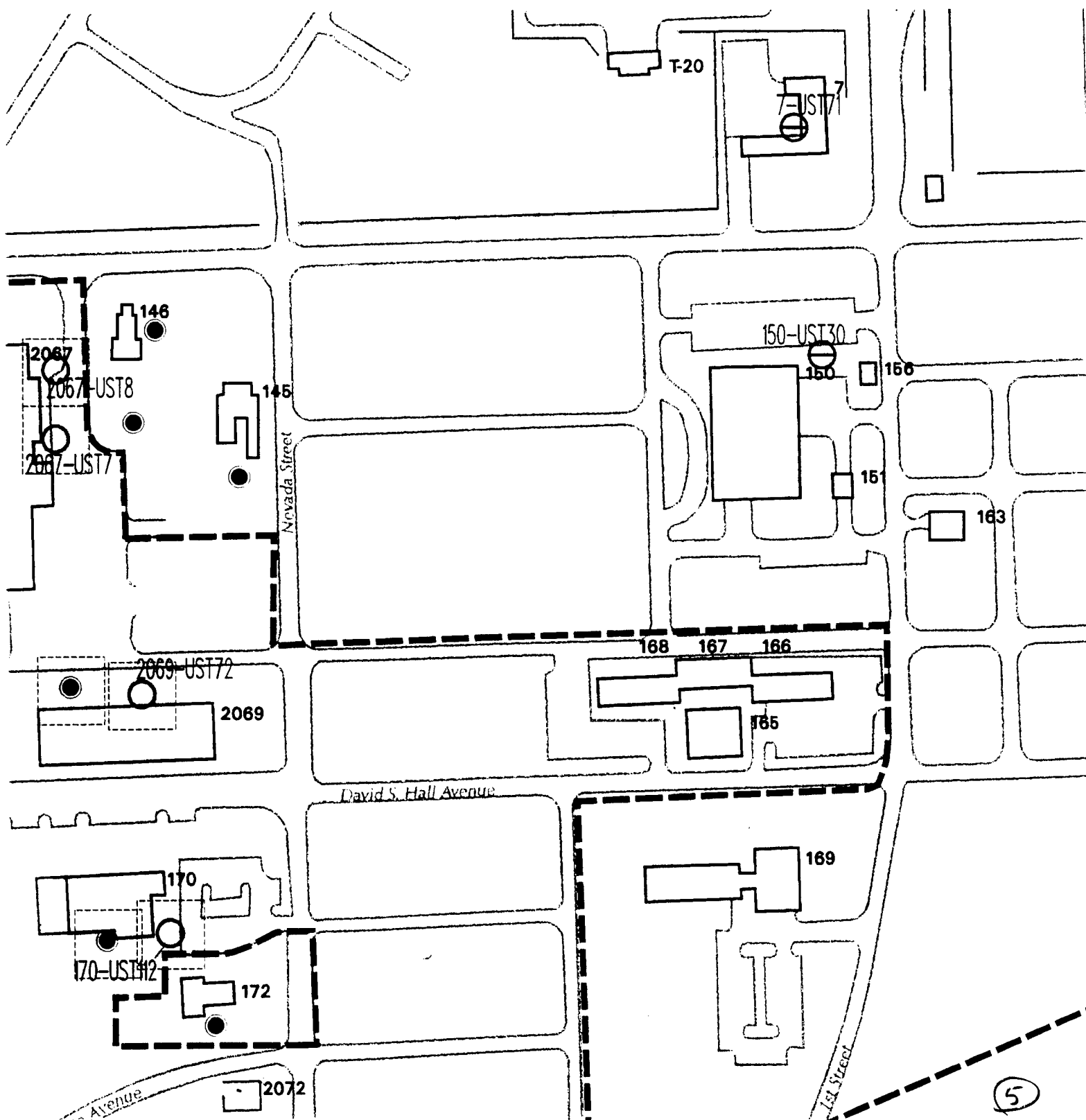
IRP and Other Sites Near
the Herlong Reuse Parcel
Environmental Baseline Survey

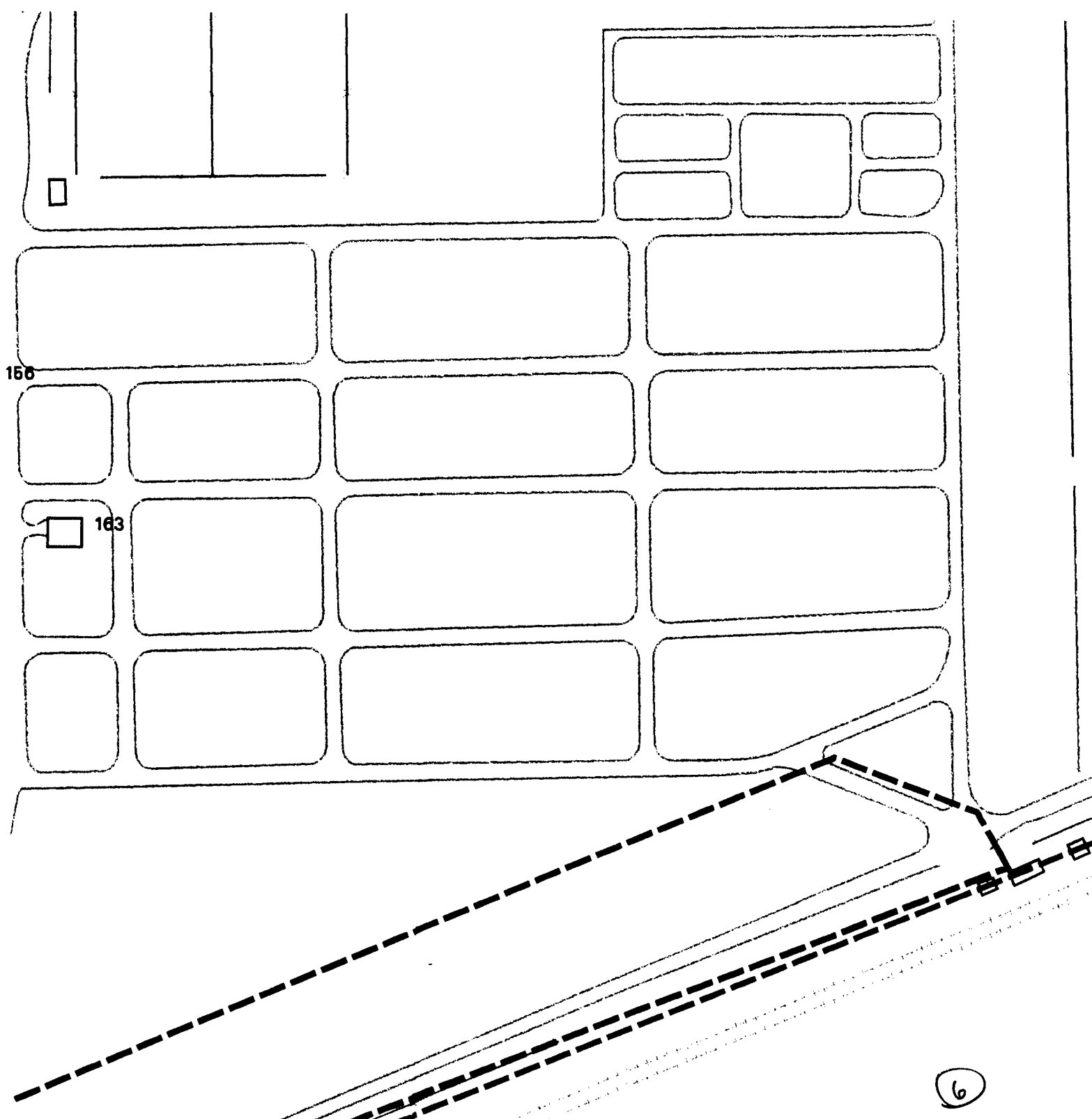


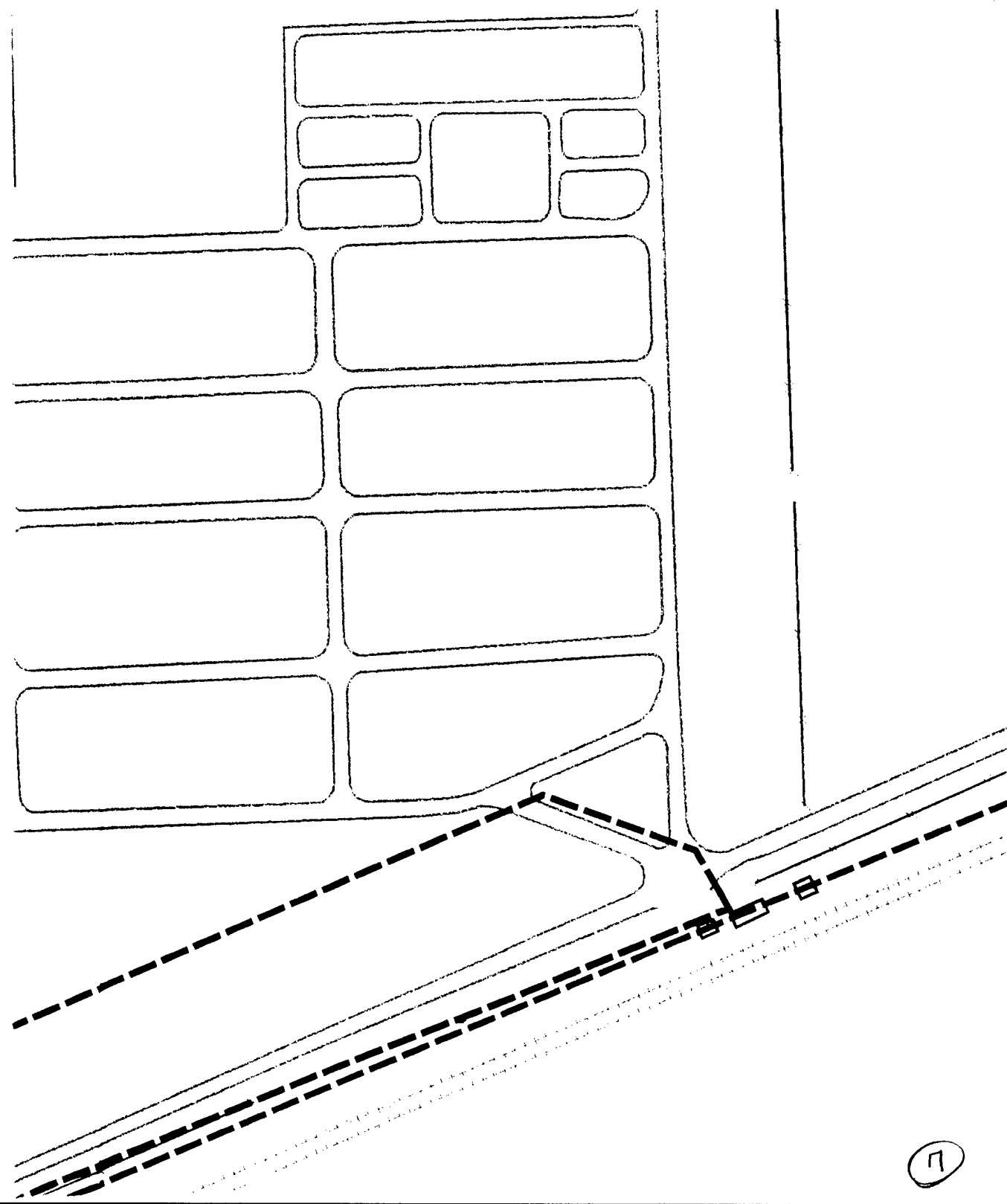


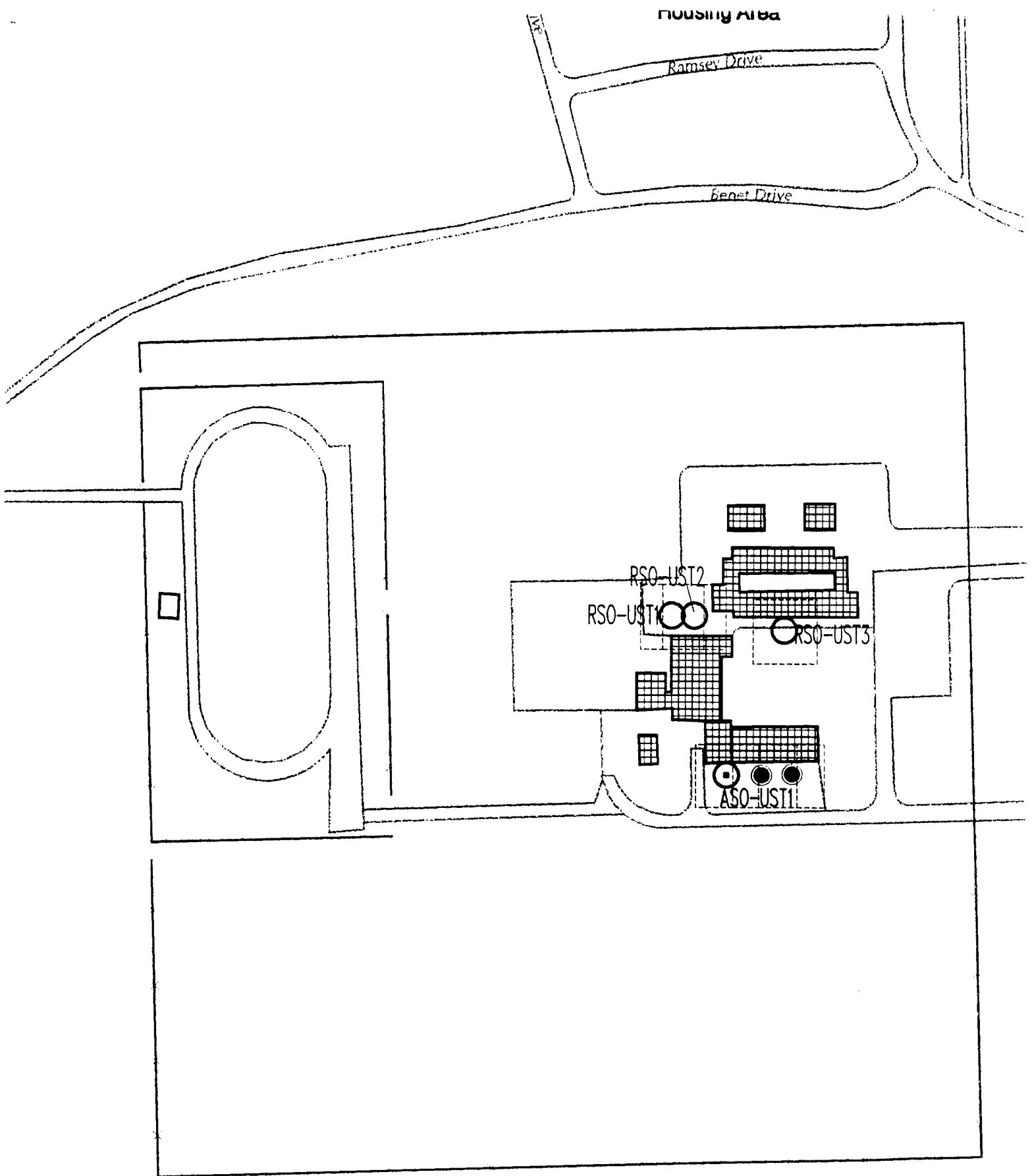


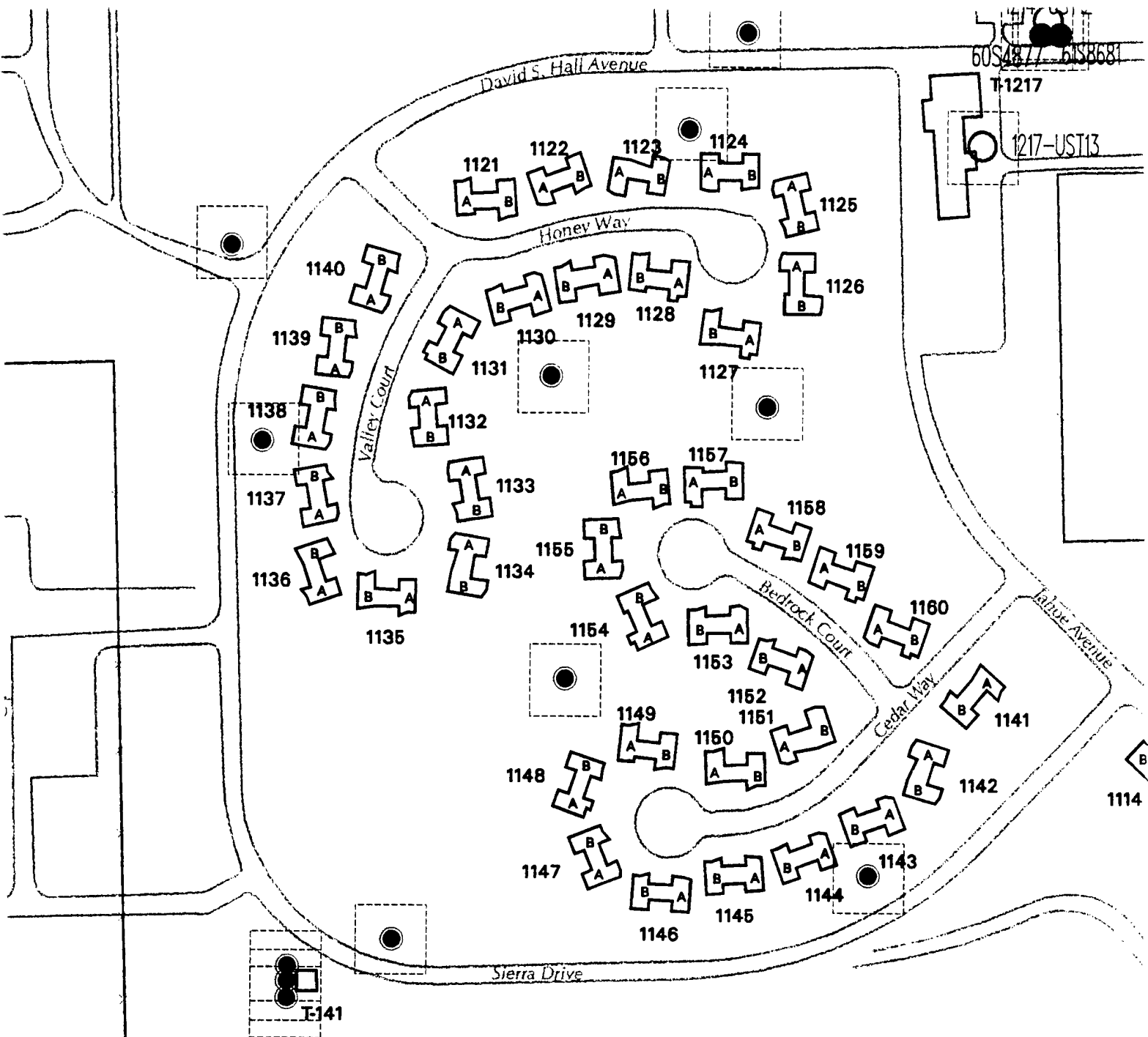


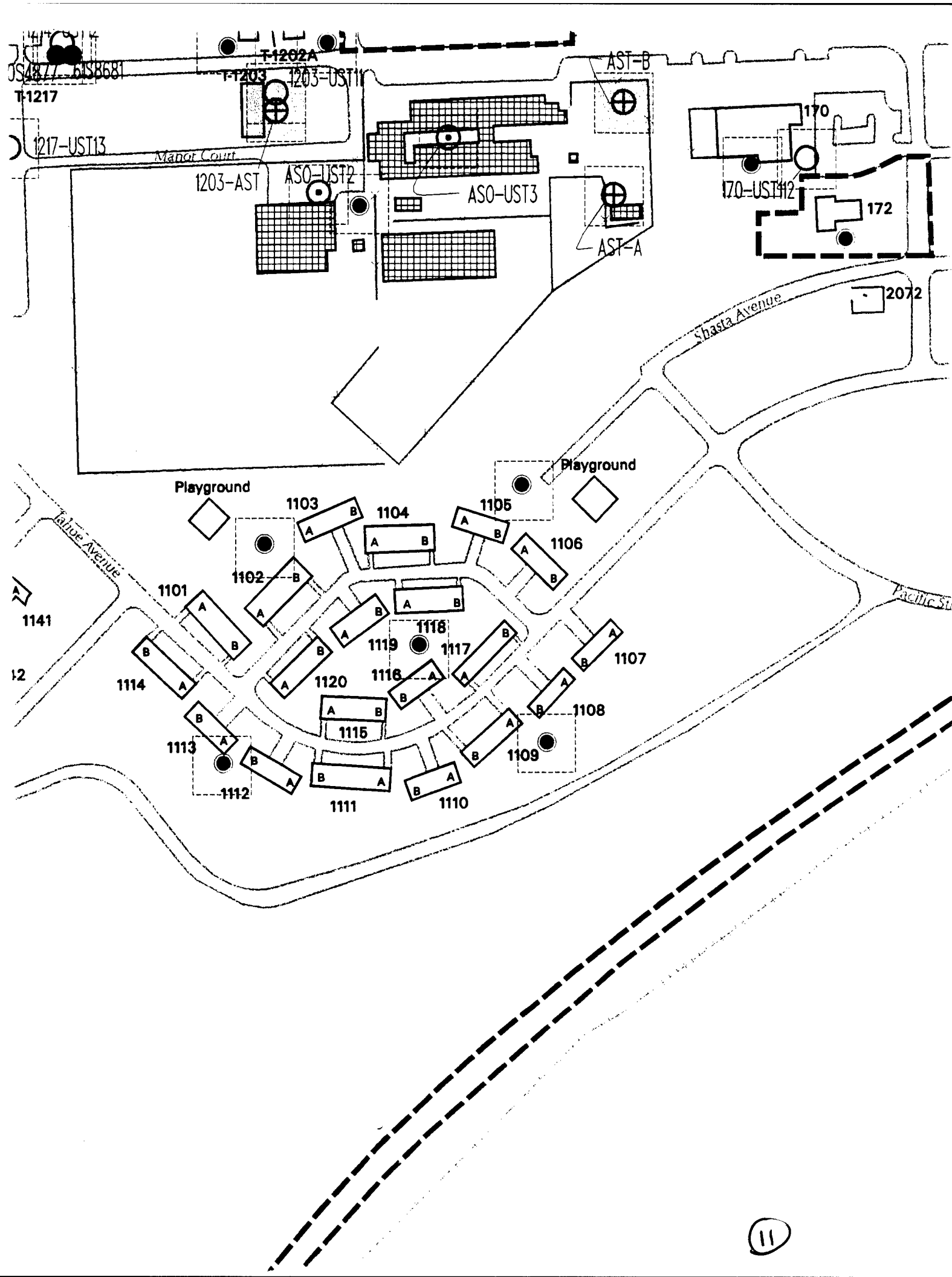












David S. Little Studio

169

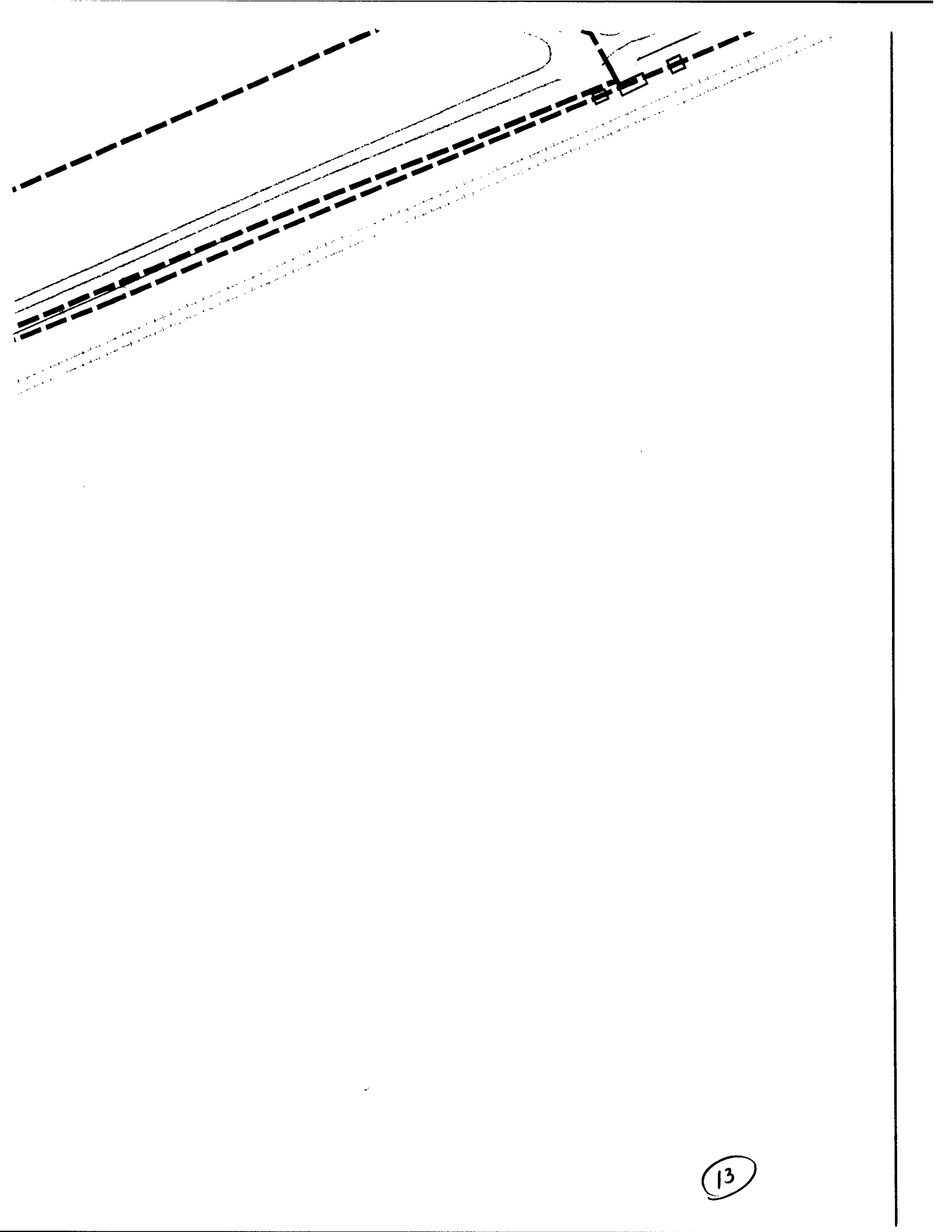
172

2072

Tabor Avenue

1st Street

Pacific Street







T-141

1146

Sierra Drive

1112



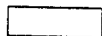
Department of Defense Environmental Condition (DoD, 1993)



Category 1: Areas where no storage, release, or disposal of hazardous products has occurred (including no migration of these substances)



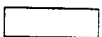
Category 2: Areas where only storage of hazardous substance (but no release, disposal, or migration from adjacent areas has occurred)



Category 3: Areas where storage, release, disposal, and/or migration of petroleum products has occurred, but at concentrations that do not require remedial action



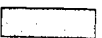
Category 4: Areas where storage, release, disposal, and/or migration of petroleum products has occurred, and all remedial actions necessary to protect the environment have been taken



Category 5: Areas where storage, release, disposal, and/or migration of petroleum products has occurred, removal and/or remedial actions have not yet been taken



Category 6: Areas where storage, release, disposal, and/or migration of petroleum products has occurred, but required response action has not been taken



Category 7: Areas that are unevaluated or require additional evaluation

EXPLANATION

(DoD, 1993)

Disposal of hazardous substances or petroleum products (these substances from adjacent areas)

Disposal of hazardous substances or petroleum products has occurred (these substances from adjacent areas has occurred)

Disposal of hazardous substances or petroleum products has occurred (these substances from adjacent areas has occurred)

Disposal of hazardous substances or petroleum products has occurred (these substances from adjacent areas has occurred)

Disposal of hazardous substances or petroleum products has occurred (these substances from adjacent areas has occurred)

Disposal of hazardous substances or petroleum products has occurred (these substances from adjacent areas has occurred)

Disposal of hazardous substances or petroleum products has occurred (these substances from adjacent areas has occurred)

Disposal of hazardous substances or petroleum products has occurred (these substances from adjacent areas has occurred)



Installation boundary per USGS topographic maps



Herlong reuse parcel boundary



Buildings



Railroad



Roads



Fence



State of California owned buildings



Location of existing above ground storage tank (AST)



Location of existing underground storage tank (UST)



Location of underground storage tank abandoned in place



Location of removed underground storage tank



Known existing polychlorinated biphenyl (PCB) contamination (see Table 2 regarding levels of PCB contamination in soil)

tion boundary per USGS topographic maps

reuse parcel boundary

is

California owned buildings

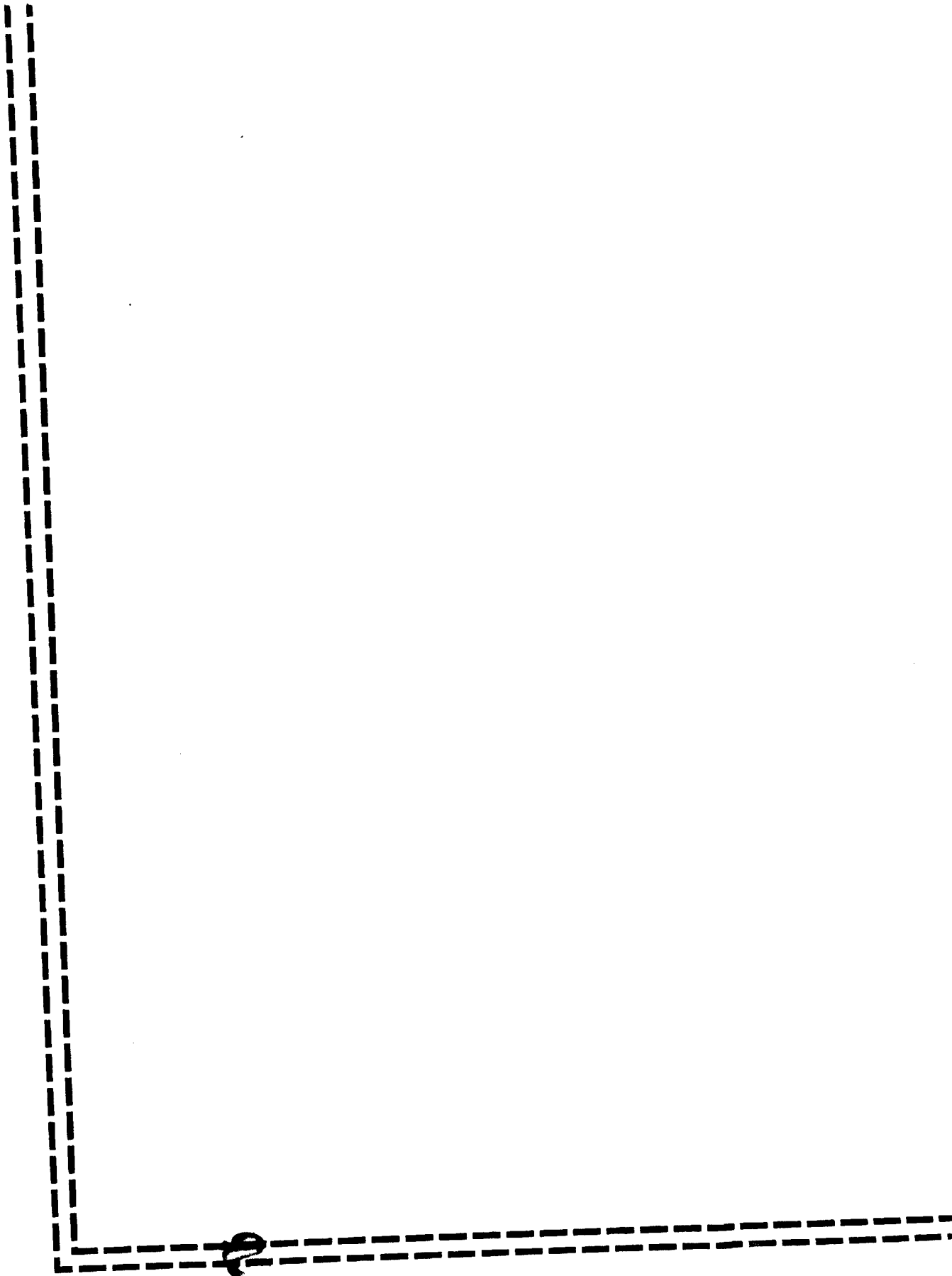
1 of existing above ground storage tank (AST)

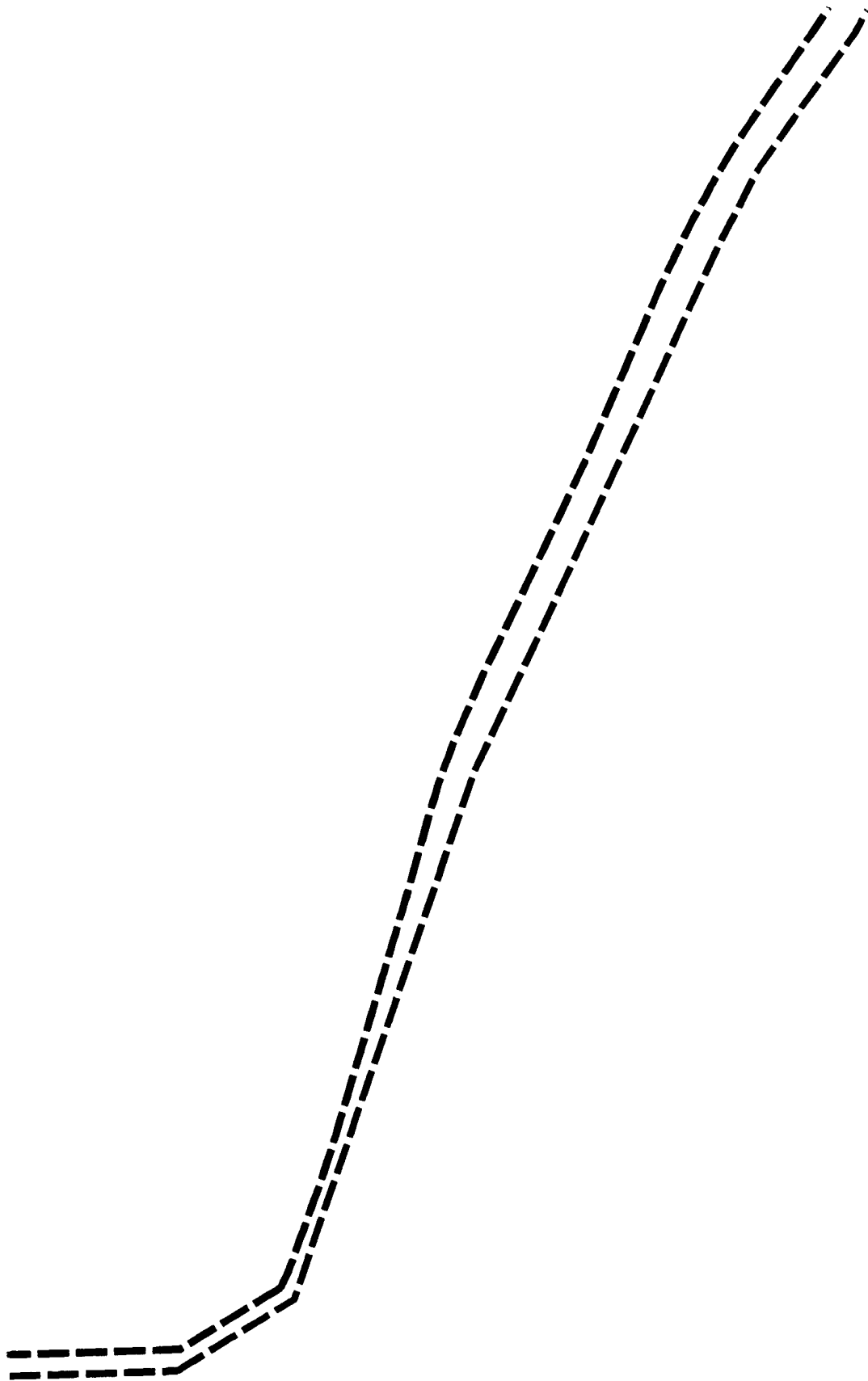
1 of existing underground storage tank (UST)

1 of underground storage tank abandoned in place

1 of removed underground storage tank

existing polychlorinated biphenyl (PCB) containing transformers (Refer to







Category 3: Areas where storage, release, disposal of petroleum products has occurred, but at con



Category 4: Areas where storage, release, disposal of petroleum products has occurred, and all remedial actions have been taken



Category 5: Areas where storage, release, disposal of petroleum products has occurred, removal actions have not yet been taken



Category 6: Areas where storage, release, disposal of petroleum products has occurred, but require



Category 7: Areas that are unevaluated or require

Notes: Property boundaries indicated are as per legal description of the parcel(s).
DoD Environmental conditions are or



storage, release, disposal, and/or migration of hazardous substances or occurred, but at concentrations that do not require removal or remedial action

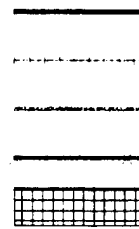
storage, release, disposal, and/or migration of hazardous substances or occurred, and all remedial actions necessary to protect human health and the taken

storage, release, disposal, and/or migration of hazardous substances or occurred, removal and/or remedial actions are under way, but all required remedial taken

storage, release, disposal, and/or migration of hazardous substances or occurred, but required response actions have not yet been implemented

are unevaluated or require additional evaluation

ies indicated are approximate and are not intended to represent the of the parcel(s).
al conditions are only represented for areas on the Herlong Parcel.



- Buildings
- Railroad
- Roads
- Fence
- State of California owned built
- Location of existing above ground
- Location of existing underground
- Location of underground storage
- Location of removed underground
- Known existing polychlorinated biphenyls (see Table 8 regarding levels of PCB in transformer). Serial numbers are shown adjacent to former
- Known existing transformers were tested in each individual
- Location of removed PCB containers are shown adjacent to former



Scale in feet

Buildings
Railroad
Roads
Fence

State of California owned buildings

Location of existing above ground storage tank (AST)

Location of existing underground storage tank (UST)

Location of underground storage tank abandoned in place

Location of removed underground storage tank

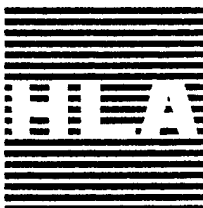
Known existing polychlorinated biphenyl (PCB) containing transformers (Refer to Table 8 regarding levels of PCB-containing oils in each individual transformer). Serial numbers are shown adjacent to transformer locations

Known existing transformers within the Herlong parcel. Levels of PCB-containing fluids were tested in each individual transformer and found to be below 5 ppm.

Location of removed PCB containing transformer. Serial numbers are shown adjacent to former transformer location.

Source: Sierra Army Depot, Environmental Management Division

25

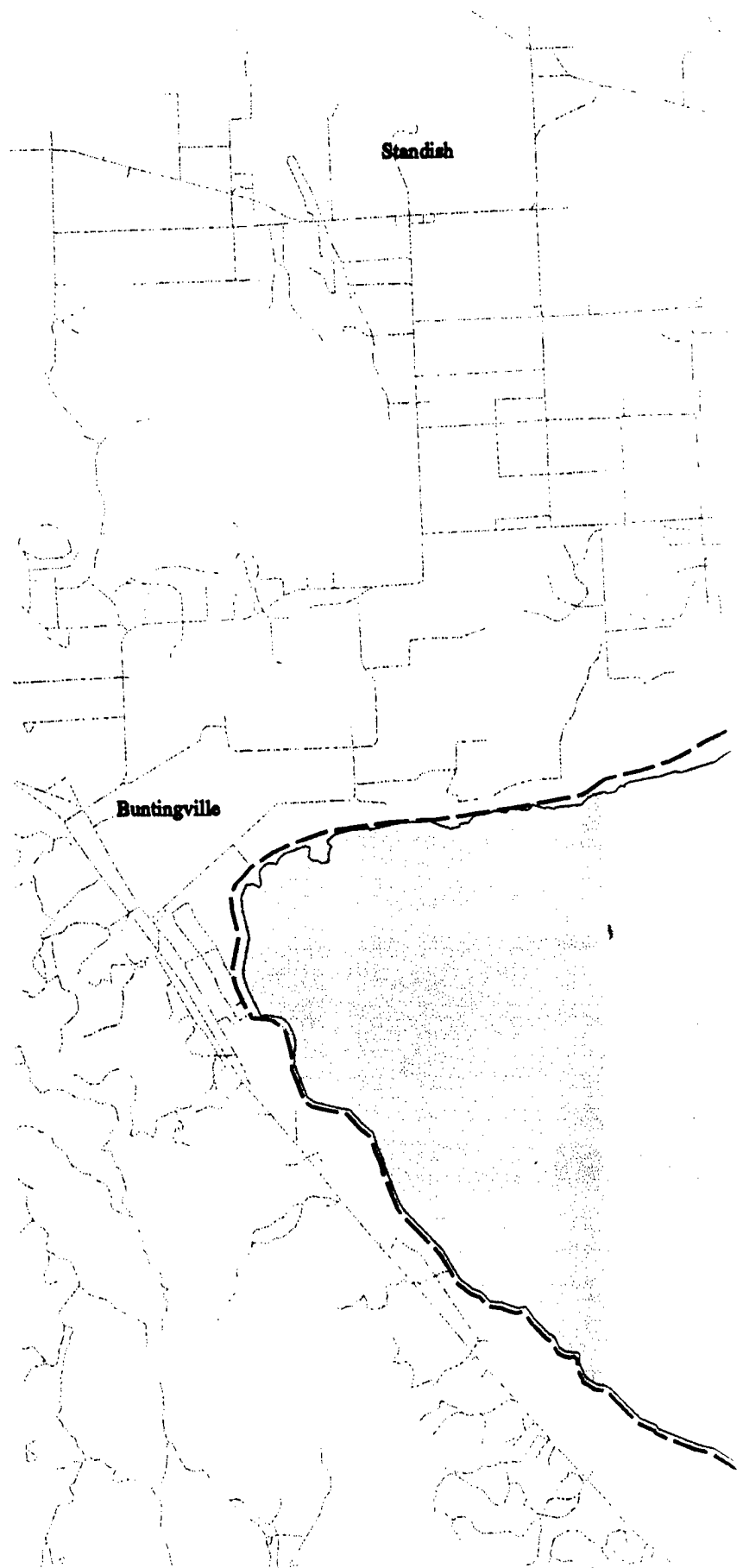


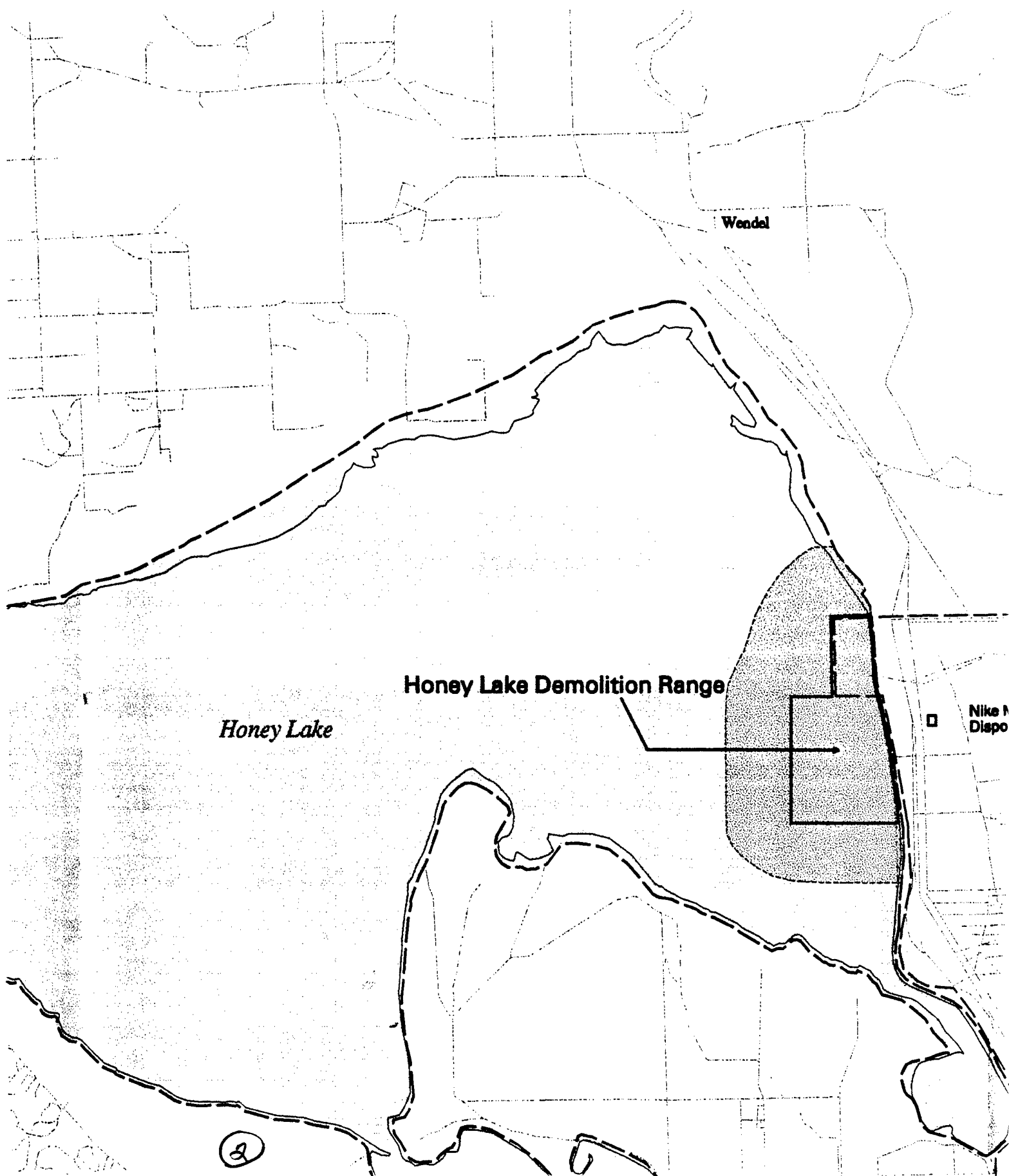
Harding Lawson Associates
Engineering and
Environmental Services

CERFA Map
Herlong Parcel
Sierra Army Depot
Environmental Baseline Survey
Lassen County, California

PLATE
7

DRAWN DBJ	JOB NUMBER 32100 11.05.00	APPROVED	DATE 4/28/96	REVISED DATE 2/20/97
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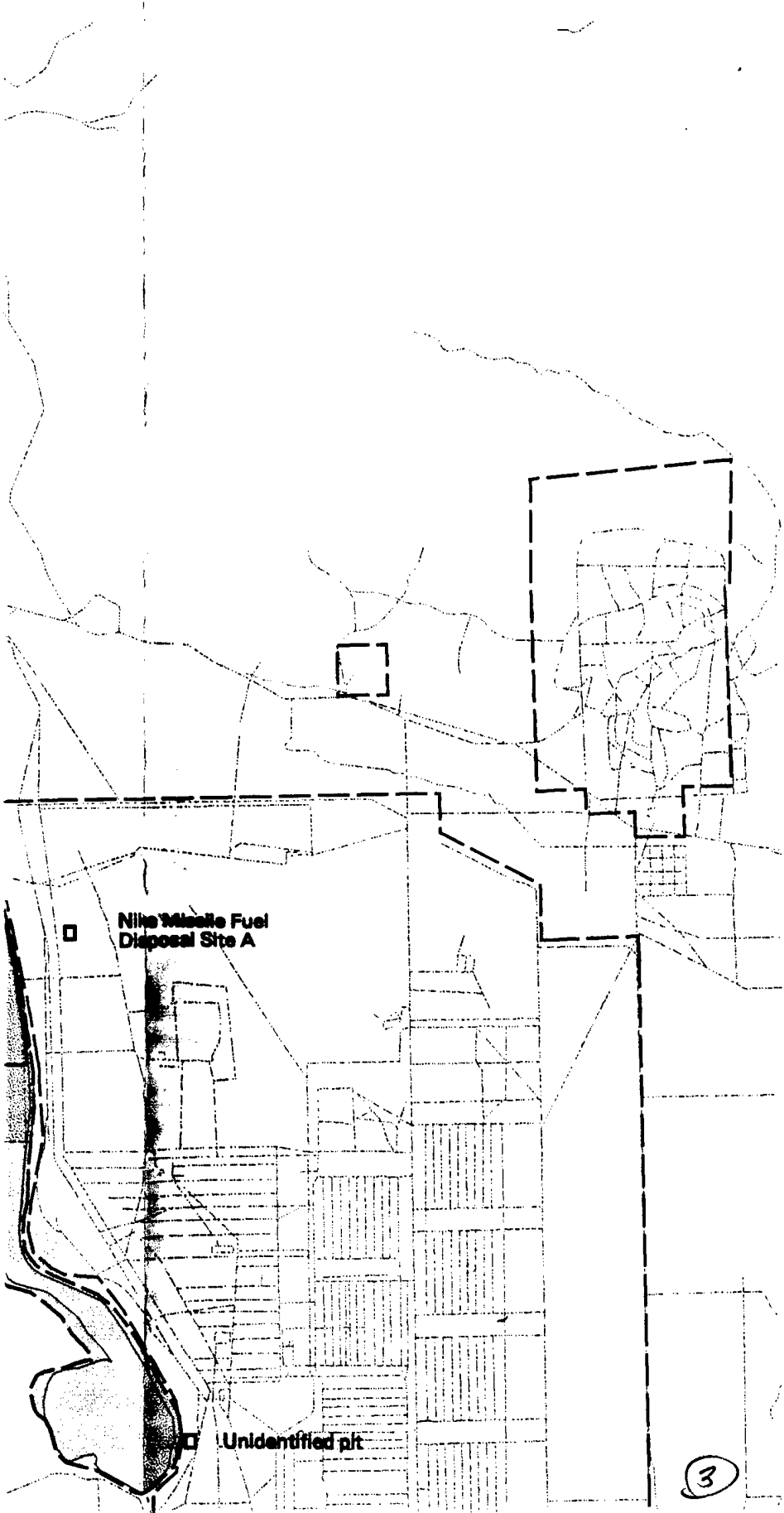
Wendel

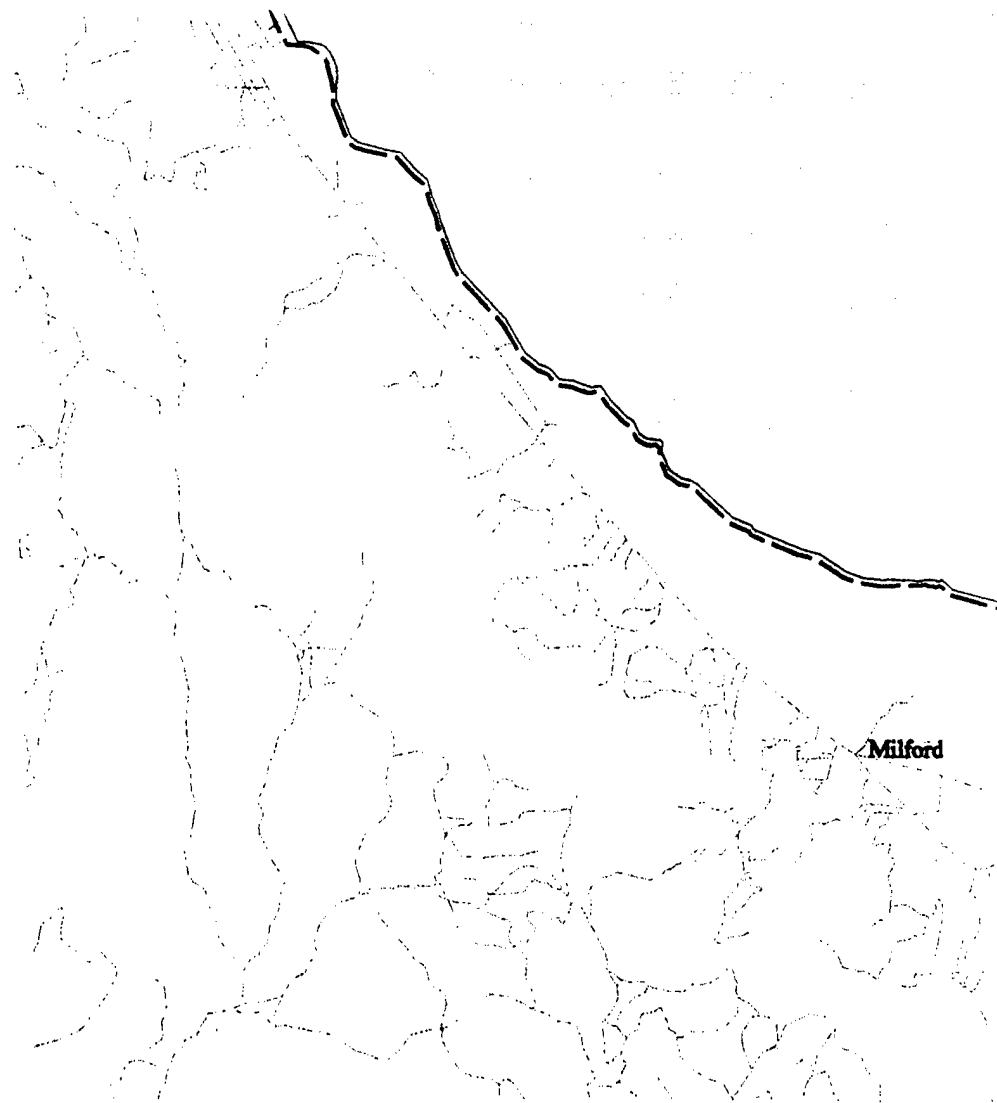
Honey Lake Demolition Range

Honey Lake

Nike H
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


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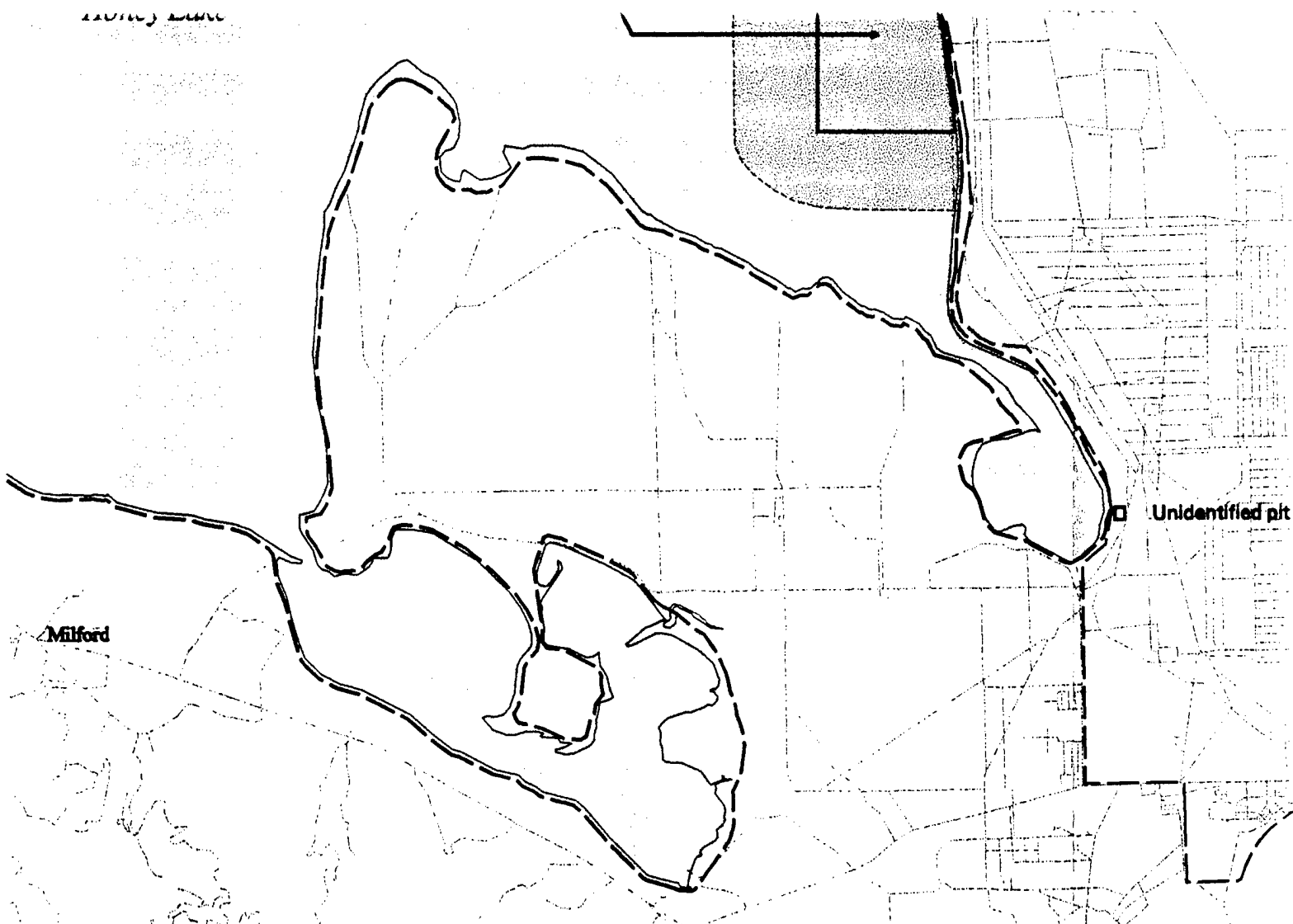
EXPLANATION

Department of Defense Environmental Condition (DoD, 1983)

-  Category 1: Areas where no storage, release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)
-  Category 2: Areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred)
-  Category 3: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require removal or remedial action
-  Category 4: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken
-  Category 5: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are under way, but all required remedial actions have not yet been taken
-  Category 6: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented
-  Category 7: Areas that are unevaluated or require additional evaluation

4

Note: Property boundaries indicated are approximate and are not intended to represent the legal description of the parcel



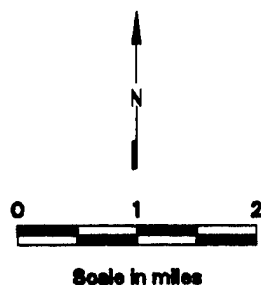
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- Honey Lake reuse parcel boundary
- Approximate Honey Lake shore
- Installation boundary per USGS topographic maps
- Roads
- IRP Site

Note:

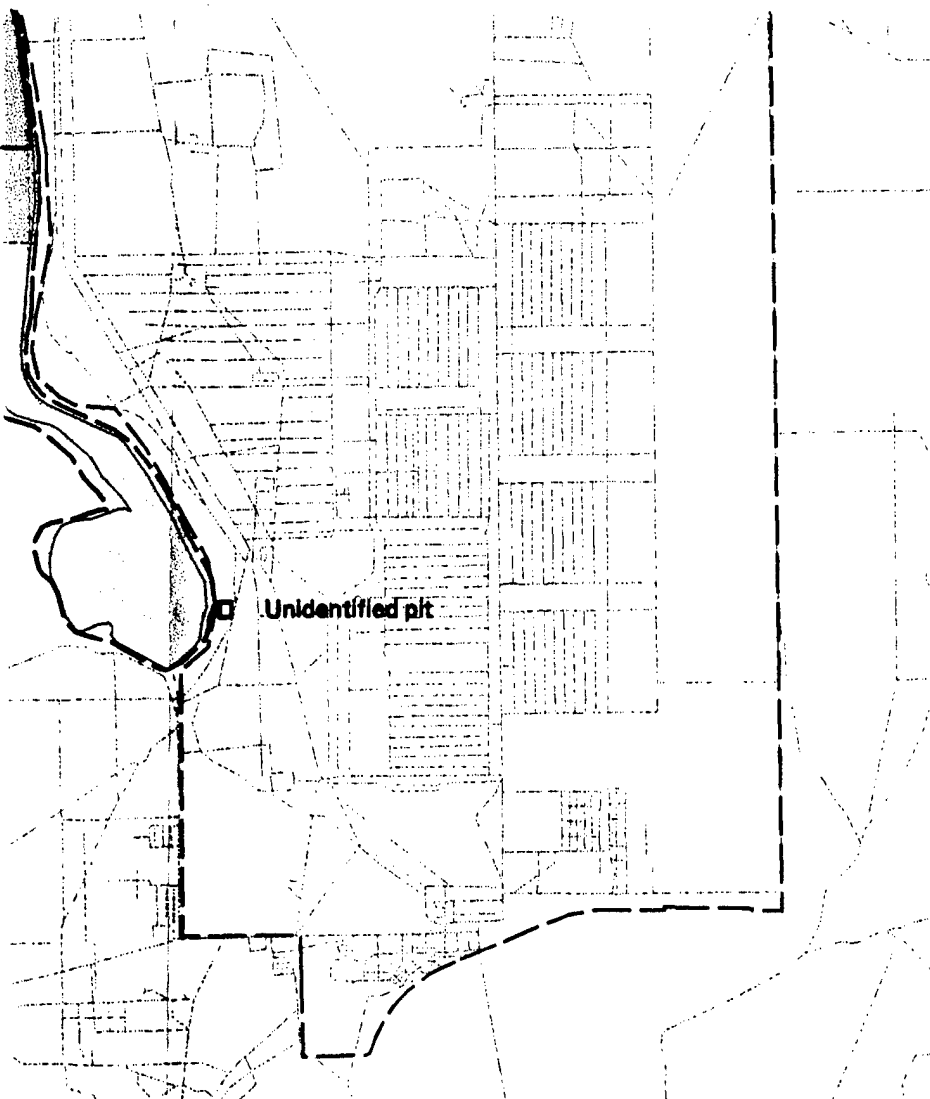
Source:



5

ion of the parcel(s).

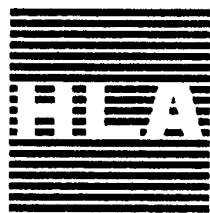




Note: Of the 60,108 acres comprising the Honey Lake Parcel, 55,241 acres have been classified as CERFA Category 3 due to the potential release of lead from bullets reported to have been strafed into the lake bed.

Source: Parcel, shoreline, and property boundaries from
SIAD Environmental Management Division

(6)



Harding Lawson Associates
Engineering and
Environmental Services

CERFA Map
Honey Lake Parcel
Sierra Army Depot
Environmental Baseline Survey
Lassen County, California

PLATE

8

DRAWN	JOB NUMBER	APPROVED	DATE	REVISION DATE
LATJUM	32100 11.05.00		4/26/96	3/13/97

APPENDIX A

VISTA ENVIRONMENTAL INFORMATION AGENCY DATABASE REPORT

VISTA ENVIRONMENTAL INFORMATION

FED/STATE REPORT

Client Project/P.O. No.: 32100-110101 VISTA Report No.: 086488001
 Client Reference Name: Date of Report: Oct. 9, 1995

Site Description
 Subject Property: SIERRA ARMY DEPOT
 Address:
 City: MILFORD
 State: CA
 Zip: 96121
 County: LASSEN

Additional Search Criteria
 City Names: 1) WENDEL 2) HERLONG
 Zip Codes: 1) 96136 2) 96113

SITES FOUND

Agency/Database	Date of Data	# of Sites In Zip Code	# of Other Sites In the Area
US,EPA,NPL	05/95	0	0
US,EPA,CERCLIS	03/95	3	0
US,EPA,FINDS	11/94	6	0
US,EPA,RCRA*	06/95	2	0
US,EPA,ERNS	09/93	9	0
US,EPA,OPEN DUMP SITES	06/85	0	0
State,SPL	04/95	4	0
	04/95	.....	.....
State,LUST	02/95	4	0
State,UST	02/95	15	0
	01/94	.....	.....
State,SPILL	12/90	0	0
	05/95	.....	.....
	07/95	.....	.....
	05/95	.....	.....

For a description of this report please turn to the last page.

Rev4.12,Jul 16 1995

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FOR MORE INFORMATION CALL (619)450-6100

5060 Shoreham Place, Suite 300, San Diego, CA 92122

Agency/Database	Date of	# of Sites	# of Other Sites
State,SOLID WASTE	03/95	3	0
	05/95	.....	.....

***Please Note: This is the most current data available from the US,EPA**

For a description of this report please turn to the last page.

Rev4.12,Jul 18 1995

©VISTA ENVIRONMENTAL INFORMATION, INC., 1993

FOR MORE INFORMATION CALL (619)450-6100

5060 Shoreham Place, Suite 300, San Diego, CA 92122

VISTA ENVIRONMENTAL INFORMATION

NPL Sites	
Client Project/P.O. No.: 32100-110101	VISTA Report No.: 086488001
Client Reference Name:	Date of Report: Oct. 9, 1995
Site Description	
Subject Property:	SIERRA ARMY DEPOT
Address:	
City:	MILFORD
State:	CA
Zip:	96121
County:	LASSEN
Additional Search Criteria	
City Names:	1) WENDEL 2) HERLONG
Zip Codes:	1) 96136 2) 96113

The National Priorities List (NPL) is the EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or meet three specific criteria set jointly by the US Dept of Health and Human Services and the US EPA in order to become an NPL site.

A search of the 05/95 NPL database revealed the following sites within the zip code area of the subject property.

SITES IN ZIP CODE

0 site(s) found in the zip code area(s)

VISTA ENVIRONMENTAL INFORMATION

CERCLIS Sites

Client Project/P.O. No.: 32100-110101

VISTA Report No.: 086488001

Client Reference Name:

Date of Report: Oct. 9, 1995

Site Description

Subject Property: SIERRA ARMY DEPOT

Address:

City: MILFORD

State: CA

Zip: 96121

County: LASSEN

Additional Search Criteria

City Names: 1) WENDEL 2) HERLONG

Zip Codes: 1) 96136 2) 96113

The CERCLIS List contains sites which are either proposed to or on the National Priorities List(NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL. The information on each site includes a history of all pre-remedial, remedial, removal and community relations activities or events at the site, financial funding information for the events, and unrestricted enforcement activities.

A search of the 03/95 CERCLIS database revealed the following sites within the zip code area of the subject property.

SITES IN ZIP CODE

Facility Name : SIERRA ARMY DEPOT

Vista Number: 381050

Facility Address : COUNTY RTE A26

EPA ID: CA5210020843

Facility City/Zip : HERLONG, CA 96113

County : LASSEN

Site Information

Status: NOT ON NPL

Site Ownership: FEDERALLY OWNED

CERCLA EVENTS

Event Type: DISCOVERY
Event Status: NOT REPORTED
Actual Completion Date: 01/01/79

Event Type: PRELIMINARY ASSESSMENT
Event Status: LOW
Actual Completion Date: 03/01/87

Event Type: PRELIMINARY ASSESSMENT
Event Status: HIGH
Actual Completion Date: 12/15/93

Event Type: SCREENING SITE INSPECTION
Event Status: HIGH
Actual Completion Date: 12/15/93

Site Description

Description: UNKNOWNPESTICIDES ?DDT!OTHER: AMMUNITION
EXPLOSIVE RESIDUESDRUMS, ABOVE GROUNDHAZARD
UNCERTAINOTHER:NON-LISTED IGNITABLE, REACTIVE
AND TOXIC WASTESIA OF SIERRA ARMY DEPOT- REPORT
#149REASSESSMENT OF SIERRA ARMY DEPOT - REPORT
#149RRCRA (MAJOR) REGULATED:GENERATOR, TSD
FACILITY (NON HANDLER) SEE NOTIF& PART A FILENOTIS
103(C) SITE

Facility Name : BLM HORSE CORRAIS
Facility Address : HWY 395 @VIEWLAND 6MI NW OF
Facility City/Zip : WENDEL , CA 96136
VISTA Enhanced
City/Zip : JANESVILLE , CA 96136
County : LASSEN

Vista Number: 50706
EPA ID: CA3141190196

Site Information

Status: NOT ON NPL
Site Ownership: FEDERALLY OWNED

CERCLA EVENTS

Event Type: DISCOVERY
Event Status: NOT REPORTED
Actual Completion Date: 06/01/86

Event Type: PRELIMINARY ASSESSMENT
Event Status: NO FURTHER REMEDIAL ACTION PLANNED
Actual Completion Date: 05/26/92

Site Description

Description: NOTIS (103C) SITEPESTICIDES- 2,4-D

Facility Name : CASH INDUSTRIES INC
Facility Address : NEAR HWY 395
Facility City/Zip : MILFORD , CA 96121
County : LASSEN

Vista Number: 1592635
EPA ID: CAD049756026

Site Information

Status: NOT ON NPL
Site Ownership: UNKNOWN
Lead Agency: NO DETERMINATION

CERCLA EVENTS

Event Type: DISCOVERY
Lead Agency: EPA FUND FINANCED
Event Status: NOT REPORTED
Actual Completion Date: 12/01/79

Event Type: PRELIMINARY ASSESSMENT
Lead Agency: EPA FUND FINANCED
Event Status: NOT REPORTED
Actual Completion Date: 07/01/80

Event Type: PRELIMINARY ASSESSMENT
Lead Agency: EPA FUND FINANCED
Event Status: NO FURTHER REMEDIAL ACTION PLANNED
Actual Completion Date: 01/17/90

Site Description

Description: UNKNOWNIMPOUNDMENTHAZARD UNCERTAINPRE 9/82 PA

3 site(s) found in the zip code area(s)

VISTA ENVIRONMENTAL INFORMATION

FINDS Sites

Client Project/P.O. No.: 32100-110101

VISTA Report No.: 086488001

Client Reference Name:

Date of Report: Oct. 9, 1995

Site Description

Subject Property: SIERRA ARMY DEPOT

Address:

City: MILFORD

State: CA

Zip: 96121

County: LASSEN

Additional Search Criteria

City Names: 1) WENDEL 2) HERLONG

Zip Codes: 1) 96136 2) 96113

The Facility Index System (FINDS) is a compilation of any property or site which the EPA has investigated, reviewed or been made aware of in connection with its various regulatory programs. Each record indicates the EPA Program Office that may have files on the site or facility.

A search of the 11/94 FINDS database revealed the following sites within the zip code area of the subject property.

SITES IN ZIP CODE

Facility Name : PLUMAS-SIERRA RURAL ELECTRIC

Vista Number: 1269709

Facility Address : 450-040 US 395

EPA ID: CAD983566647

Facility City/Zip : MILFORD , CA 96121

Agency Id Information

Program Name: TOXICS-PADS

Agency Id: CAD983566647

Facility Name : USARMY SIERRA ARMY DEPOT
Facility Address : COUNTY RTE A26
Facility City/Zip : HERLONG , CA 96113

Vista Number: 319406
EPA ID: CA521382084

Agency Id Information

Program Name: Haz Waste
Agency Id: CA5210020843

Program Name: AIR
Agency Id: 0603500507

Program Name: CERCLIS
Agency Id: CA5210020843

Program Name: FTTS/NCDB
Agency Id: I09#19901114R00

Program Name: Fed Activities
Agency Id: CA-213820843

Program Name: Fed Activities
Agency Id: CA-210020843

Program Name: TOXICS-PADS
Agency Id: CA5210020843

Facility Name : USDOI BLM HORSE CORRALS
Facility Address : HWY 395 AT VIEWLAND
Facility City/Zip : WENDEL , CA 96136
VISTA Enhanced
City/Zip : JANESVILLE , CA 96136

Vista Number: 3204609
EPA ID: CA3141190196

Agency Id Information

Program Name: CERCLIS
Agency Id: CA3141190196

USDOI BLM HORSE CORRALS (continued)

Program Name: Fed Activities

Agency Id: CA-141190196

Facility Name	:	USDOD DL OSB SIERRA ARMY DEPOT	Vista Number:	3201998
Facility Address	:	HWY 395 BLDG T 316	EPA ID:	CA3971520843
Facility City/Zip	:	HERLONG , CA 96113		

Agency Id Information

Program Name: Fed Activities

Agency Id: CA-971520843

Facility Name	:	USFS MILFORD RANGER DISTRICT	Vista Number:	446910
Facility Address	:	2.5 MI SE MILFORD CA RD 336	EPA ID:	CA2122390253
Facility City/Zip	:	MILFORD , CA 96121		

Agency Id Information

Program Name: Haz Waste

Agency Id: CA2122390253

Facility Name	:	CASH IND INC	Vista Number:	72929
Facility Address	:	NR HWY 395	EPA ID:	CAD049756026
Facility City/Zip	:	MILFORD , CA 96121		

Agency Id Information

Program Name: CERCLIS

Agency Id: CAD049756026

6 site(s) found in the zip code area(s)

VISTA ENVIRONMENTAL INFORMATION

RCRA Sites

Client Project/P.O. No.: 32100-110101

VISTA Report No.: 086488001

Client Reference Name:

Date of Report: Oct. 9, 1995

Site Description

Subject Property: SIERRA ARMY DEPOT

Address:

City: MILFORD

State: CA

Zip: 96121

County: LASSEN

Additional Search Criteria

City Names: 1) WENDEL 2) HERLONG

Zip Codes: 1) 96136 2) 96113

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste.

A search of the 06/95 RCRIS database revealed the following sites within the zip code area of the subject property.

SITES IN ZIP CODE

Facility Name : USARMY SIERRA DEPOT

Vista Number: 3194096

Facility Address : COUNTY RTE A26

EPA ID: CA5210020843

Facility City/Zip : HERLONG , CA 96113

County : LASSEN

Generator Details

Waste Quantity Class: Generates at least 1000 kg./month of non-acutely hazardous waste (or 1 kg./month of acutely hazardous waste).

TSD Details

TSD Activities This facility is engaged in the treatment/storage and or disposal of hazardous waste

Incinerator Universe: VERIFIED INCINERATOR FACILITY.

USARMY SIERRA DEPOT (continued)

Storage Treatment Universe: VERIFIED STORAGE/TREATMENT FACILITY.

Facility Name	:	USDA FS MILFORD RANGER DISTRICT	Vista Number:	4062527
Facility Address	:	2.5 MI SE MILFORD CA RD 336	EPA ID:	CA2122390253
Facility City/Zip	:	MILFORD , CA 96121		
County	:	LASSEN		

Generator Details

Waste Quantity Class: Generates 100 kg./month but less than 1000 kg./month of non-acutely hazardous waste

2 site(s) found in the zip code area(s)

VISTA ENVIRONMENTAL INFORMATION

ERNS Sites

Client Project/P.O. No.: 32100-110101 VISTA Report No.: 086488001
Client Reference Name: Date of Report: Oct. 9, 1995

Site Description
Subject Property: SIERRA ARMY DEPOT
Address:
City: MILFORD
State: CA
Zip: 96121
County: LASSEN

Additional Search Criteria
City Names: 1) WENDEL 2) HERLONG
Zip Codes: 1) 96136 2) 96113

SITES IN ZIP CODE

ERNS Spill Details

Spill Date	: 03/29/1990	Vista ID#:	200076454
Spill Time	: 07:30 AM	Case Number:	14952
Spill Location	: ATTN: SDSSI-ENV		
Spill City	: HERLONG		
Spill State	: CA		
Spill Zip	:		
VISTA Enhanced Zip	: 96113		
Spill County	: LASSEN		
Source/Agency	:		
Discharger Name	: JACOBS, SUSAN		
Discharger Org	: SIERRA ARMY DEPOT		
Discharger Addr	: ATTN: SDSSI-ENV		
Discharger Phone	: 916-827-4600		
Discharger County	:		
Discharger City	: HERLONG		
Discharger St/Zip	: CA, 96113		

ATTN: SDSSI-ENV Continued

Material Spilled : JET FUEL: JP-4 , 00000075.00 , GAL.
Medium Affected : Land
Water Way Affected : CEMENT PAD AND TOP SOIL

ERNS Spill Details

Spill Date : 05/04/1993 Vista ID#: 200247729
Spill Time : 10:00 AM Case Number: 171833
Spill Location : ATTN. SDSSI-ENV
Spill City : HERLONG
Spill State : CA
Spill Zip :
VISTA Enhanced Zip : 96113
Spill County : LASSEN
Source/Agency :
Discharger Name :
Discharger Org : SERRIA ARMY DEPO
Discharger Addr : ATTN. SDSSI-ENV
Discharger Phone : 916-827-4825
Discharger County :
Discharger City : HERLONG
Discharger St/Zip : CA, 96113
Material Spilled : No Materials Reported
Medium Affected : Ground Water
Water Way Affected : 90' BELOW GROUND LEVEL

ERNS Spill Details

Spill Date : 05/04/1993 Vista ID#: 200225876
Spill Time : 10:00 AM Case Number: 171833
Spill Location : ATTN. SDSSI-ENV
Spill City : HERLONG
Spill State : CA
Spill Zip :
VISTA Enhanced Zip : 96113
Spill County : LASSEN
Source/Agency :

ATTN. SDSSI-ENV Continued

Discharger Name : WEIS, ROBERT
 Discharger Org : SERRIA ARMY DEPO
 Discharger Addr : ATTN. SDSSI-ENV
 Discharger Phone : 916-827-4825
 Discharger County :
 Discharger City : HERLONG
 Discharger St/Zip : CA, 96113
 Material Spilled : No Materials Reported
 Medium Affected : Ground Water
 Water Way Affected : 90' BELOW GROUND LEVEL

ERNS Spill Details

Spill Date : 05/04/1993 Vista ID#: 200253107
 Spill Time : 10:00 AM Case Number: 93-3947
 Spill Location : ATTN. SDSSI-ENV (SIERRA ARMY DEPOT)
 Spill City : HERLONG
 Spill State : CA
 Spill Zip : 96113
 Spill County : LASSEN
 Source/Agency :
 Discharger Name :
 Discharger Org : USA-SERRIA ARMY DEPOT
 Discharger Addr : SERRIA ARMY DEPOT ATTN SDSSI-E
 Discharger Phone : 916-827-4825
 Discharger County : LASSEN
 Discharger City : HERLONG
 Discharger St/Zip : CA, 96113
 Material Spilled : No Materials Reported
 Medium Affected : Ground Water
 Water Way Affected : N/A

ERNS Spill Details

Spill Date : 05/04/1993 Vista ID#: 200229073
 Spill Time : 10:00 AM Case Number: 93-3947

Spill Location : ATTN. SDSSI-ENV (SIERRA ARMY DEPOT)
 Spill City : HERLONG
 Spill State : CA
 Spill Zip : 96113-
 Spill County : LASSEN
 Source/Agency :
 Discharger Name : WEIS, ROBERT
 Discharger Org : USA-SERRIA ARMY DEPOT
 Discharger Addr : SERRIA ARMY DEPOT ATTN SDSSI-E
 Discharger Phone : 916-827-4825
 Discharger County : LASSEN
 Discharger City : HERLONG
 Discharger St/Zip : CA, 96113
 Material Spilled : No Materials Reported
 Medium Affected : Ground Water
 Water Way Affected : N/A

ERNS Spill Details

Spill Date : 12/19/1991 Vista ID#: 200067464
 Spill Time : 09:00 AM Case Number: 92-1347A
 Spill Location : HWY 395 SB 5 MI S OF MILDORD. ON WEST SIDE OF HWY
 Spill City : MILFORD (NR)
 Spill State : CA
 Spill Zip : 96121-
 VISTA Enhanced City : MILFORD
 Spill County : LASSEN
 Source/Agency : FD
 Discharger Name :
 Discharger Org : NORRIS SUPPLY
 Discharger Addr : 325 SOUTH 18TH ST.
 Discharger Phone : 702-358-7646 -
 Discharger County : CLARK
 Discharger City : SPARKS
 Discharger St/Zip : NV, 89431-
 Material Spilled : JET FUEL JP-4 , 00000000.00 , UNK
 Medium Affected : Land
 Water Way Affected : N/A

ERNS Spill Details

Spill Date	:	12/19/1991	Vista ID#:	200066492
Spill Time	:	09:00 AM	Case Number:	100308
Spill Location	:	HY 395 SOUTHBOUND		
Spill City	:	MILFORD		
Spill State	:	CA		
Spill Zip	:			
VISTA Enhanced Zip	:	96121		
Spill County	:	LASSEN		
Source/Agency	:			
Discharger Name	:	UNKNOWN,		
Discharger Org	:	NORRIS SUPPLY		
Discharger Addr	:			
Discharger Phone	:			
Discharger County	:			
Discharger City	:	SPARKS		
Discharger St/Zip	:	NV,		
Material Spilled	:	JET FUEL: JP-4 , 00000000.00 , UNK		
Medium Affected	:	Land		
Water Way Affected	:	SOIL ON WEST SIDE OF HY		

ERNS Spill Details

Spill Date	:	03/04/1987	Vista ID#:	200120092
Spill Time	:	: AM	Case Number:	
Spill Location	:	(RP)SIERRA US ARMY DEPOT BLDG-403		
Spill City	:	HERLONG		
Spill State	:	CA		
Spill Zip	:			
VISTA Enhanced Zip	:	96113		
Spill County	:	LASSEN		
Source/Agency	:			
Discharger Name	:			
Discharger Org	:	(RP)SIERRA US ARMY DEPOT)		
Discharger Addr	:	BLDG-403		
Discharger Phone	:	9168274600		
Discharger County	:	LASSEN		
Discharger City	:	HERLONG		
Discharger St/Zip	:	CA,		

(RP)SIERRA US ARMY DEPOT BLDG- Continued

Material Spilled : DIESEL , 5000.00, GAL
 Medium Affected : Land
 Water Way Affected : N/A

ERNS Spill Details

Spill Date : 07/05/1991 Vista ID#: 200049785
 Spill Time : 04:15 PM Case Number: 78312
 Spill Location : SIERRA ARMY DEPOT BLDG 77
 Spill City : HERLONG
 Spill State : CA
 Spill Zip :
 VISTA Enhanced Zip : 96113
 Spill County : LASSEN
 Source/Agency :
 Discharger Name : HOLLIDAY, SUSAN
 Discharger Org : US ARMY- SIERRA AMM DEPOT
 Discharger Addr :
 Discharger Phone : 916-827-4205
 Discharger County :
 Discharger City : HERLONG
 Discharger St/Zip : CA, 96113
 Material Spilled : JET FUEL: JP-4 , 00000055.00 , GAL
 Medium Affected : Land
 Water Way Affected : SOIL

9 site(s) found in the zip code area(s)

VISTA ENVIRONMENTAL INFORMATION

OpenDump Sites

Client Project/P.O. No.: 32100-110101

VISTA Report No.: 086488001

Client Reference Name:

Date of Report: Oct. 9, 1995

Site Description

Subject Property: SIERRA ARMY DEPOT

Address:

City: MILFORD

State: CA

Zip: 96121

County: LASSEN

Additional Search Criteria

City Names: 1) WENDEL 2) HERLONG

Zip Codes: 1) 96136 2) 96113

SITES IN ZIP CODE

0 site(s) found in the zip code area(s)

VISTA ENVIRONMENTAL INFORMATION

State Priority Sites	
Client Project/P.O. No.: 32100-110101	VISTA Report No.: 086488001
Client Reference Name:	Date of Report: Oct. 9, 1995
Site Description	
Subject Property:	SIERRA ARMY DEPOT
Address:	
City:	MILFORD
State:	CA
Zip:	96121
County:	LASSEN
Additional Search Criteria	
City Names:	1) WENDEL 2) HERLONG
Zip Codes:	1) 96136 2) 96113

This database is provided by the Cal. Environmental Protection Agency, Dept. of Toxic Substances Control. Annual Work Plan (AWP) sites and sites where Preliminary Endangerment Assessments are a high priority are included. This database contains information from the:

Calsites Database: Annual Workplan Sites	04/95
Calsites Database: All Sites except Annual Workplan Sites (incl. ASPIS)	04/95

A search of this database revealed the following facilities located in the zip code searched. Also included are sites with incomplete addresses reported to be located in the city searched. If no city name has been reported, the county name was used.

SITES IN ZIP CODE

Facility Name	: SIERRA ARMY DEPOT	Vista Number:	1593896
Facility Address	: HONEY LAKE VALLEY	Agency ID:	18940001
Facility City/Zip	: HERLONG , CA 96113		
County	: LASSEN		

Site Information

NPL Status: NON-NPL SITE
Lead Agency: DEPT OF TOXIC SUBSTA

SIERRA ARMY DEPOT (continued)

State Status: ANNUAL WORK PLAN

Site Description

Description: 05/01/1986 THIS IS THE DATE THE SITE WAS FIRST LISTED
AWP PURSUANT TO SECTION 25356.02/10/1987 SITE
SCREENING DONE: MITRE MODEL REQUIRED.12/31/1987
REMOVAL ACTION: REMOVAL OF DIESEL SOIL- BLDG
403.12/31/1988 REMOVAL ACTION: POSTED ACCESS WARN-
INGSAROUND HONEY LAKE.10/01/1990 ERA: SEARCH
AND DESTROY OPERATION CONDUCTED ON ADJACENT
BUREAU OF LAND MANAGEMENT PROPERTY. A TOTAL
OF 827 BOMBLETS WERE DESTROYED IN A 1/2-MILE
AREA. THE AREA WAS POSTED WITH DO NOT ENTER
SIGNS.07/25/1991 ARMY BASE. CONTAMINANTS INCLUDE
TCE, CT, DCA, AR, 1,3,5-NITRO, RDX, TNB, 2,4,DNT, PB,
CD, CU, AND CR.12/15/1992 FRI/FS (EFFTA) - APPROVAL
OF REMEDIALINVESTIGATION/ FEASIBILITY STUDY FOR
EFFTA AND CONCURRENCE TO SELECT IN SITU BIORE-
MEDIATION AS THE PREFERRED REMEDIAL ACTION.
APPROX. 4,300 CUBIC YARD

Facility Name	: BLM HORSE CORRALS	Vista Number:	50706
Facility Address	: HWY 395 AT VIEWLAND - 6 MI NW OF WEN	Agency ID:	18950001
Facility City/Zip	: WENDEL , CA 96136		
VISTA Enhanced			
City/Zip	: JANESVILLE , CA 96136		
County	: LASSEN		

Site Information

NPL Status:

State Status: DELETION SITES(TO BE REM. FROM

Site Description

Description: 11/19/1987 FACILITY IDENTIFIED RWQCB DISCHARGE COMPLAINT APPROXIMATELY 130 EMPTY BARRELS WHICH CONTAINED 2,4-D BURIED BEHIND THE CORRALS, PAST THE HAYSTACKS, IN AREA WHERE DEAD CATTLE WERE DISPOSED OF.10/26/1988 SITE ON CERCLIS, DISCOVERED 6-1-86, NOINDICATION THAT PA WAS DONE.05/23/1989 FACILITY DRIVE-BY NO DISTURBED SOIL,WASTES OR BARRELS07/18/1989 SITE SCREENING DONE RECOMMEND PENDING STATUS, CHECK EPA FILE TO FIND STATUS AND OUTCOME OF SITE. DEPT FISH & GAME INVOLVED, 916-257-5206 CO HEALTH HAS NO KNOWLEDGE OF SITE.07/28/1993 AN EPA REPORT FOR INDIVIDUAL SITE SHOWS THAT A PRELIMINARY ASSESSMENT WAS CONDUCTED 5/26/92 WITH A RECOMMENDATION OF NO FURTHER ACTION.DTSC NEEDS TO DO A SITE SCREENING.

Facility Name	:	CASH INDUSTRIES INC	Vista Number:	3490416
Facility Address	:	SW OF HWY 395 & SE OF BROCKMAN CANYO	Agency ID:	18100001
Facility City/Zip	:	MILFORD , CA 96121		
County	:	LASSEN		

Site Information

NPL Status:

State Status: DELETION SITES(TO BE REM. FROM

Site Description

Description: 01/16/1990 FACILITY IDENTIFIED: EPA PRELIMINARY ASSESSMENT. EPA IS TAKING NO FURTHER ACTION. STATE RECOMMENDATION IS SITE SCREENING TO VERIFY STATUS.SITE IS LOCATED 1/4-MILE SOUTHWEST OF HWY 395 AND3/4-MILE SOUTHEAST OF BROCKMAN CANYON.

Facility Name	:	SOUTHERN PACIFIC RAILROAD - WENDEL	Vista Number:	1596030
Facility Address	:	NORTH SIDE OF ANTOLA RD, BETW RR TRA	Agency ID:	18400002
Facility City/Zip	:	WENDEL , CA 96136		
VISTA Enhanced				
City/Zip	:	JANESVILLE , CA 96136		
County	:	LASSEN		

Site Information

NPL Status:

State Status: PRELIMINARY ASSESSMENT REQ-LOW

Site Description

Description: 10/25/1985 FACILITY IDENTIFIED VIA INITIAL CONTACT LETTER TO LASSEN PARK. LETTER STATES THAT AREA ALONG OLD SOUTHERN PACIFIC (SP) RAILROAD TRACKS INWENDEL IS AN OLD OIL DUMP WITH OPEN AND FILLED PONDS (TAR PITS).05/23/1989 FACILITY DRIVE-BY: AREA IS DESERTED.MANY TRACKS CONVERG- ING. STRESSED VEG- ETATION. BOARDED-OVER SUMP. FENCED WITH BARBED WIRE. WHITE POWDERY CRYSTALS IN PONDED AREAS; POSSI- BLY SALT. LARGE CONCRETE STRUCTURE WITH ROTTED BOARDS AND WIRE.07/18/1989 SITE SCREENING DONE: RECOMMEND PRELIMINARY ASSESSMENT BASED ON BUSINESS TYPE, DRIVE-BY,AND LETTER.07/12/1990 RECORDS SEARCH (LAHONTAN RWQCB): NO RECORDS FOUND.07/13/1990 RECORDS SEARCH (DHS, REGION 1): NO RECORDS FOUND.07/24/1990 FACILITY DRIVE-BY: SITE CONSISTS OF TWO AREAS NEAR ANTOLA ROAD WHERE A TAR-TYPE SUBSTANC

4 site(s) found in the zip code area(s)

VISTA ENVIRONMENTAL INFORMATION

LUST Sites

Client Project/P.O. No.: 32100-110101 VISTA Report No.: 086488001
Client Reference Name: Date of Report: Oct. 9, 1995

Site Description
Subject Property: SIERRA ARMY DEPOT
Address:
City: MILFORD
State: CA
Zip: 96121
County: LASSEN

Additional Search Criteria
City Names: 1) WENDEL 2) HERLONG
Zip Codes: 1) 96136 2) 96113

This database is provided by the California Environmental Protection Agency. This database contains information from the:

Lust Information System (LUSTIS)

02/95

A search of this database revealed the following facilities located in the zip code searched. Also included are sites with incomplete addresses reported to be located in the city searched. If no city name has been reported, the county name was used.

SITES IN ZIP CODE

Facility Name : BLDG 1003 (TEXACO GAS STATION)
Facility Address : ATTN: SDSSI-ENZ
Facility City/Zip : HERLONG, CA 96113
County : LASSEN

Vista Number: 931344
Agency ID: 6T0044A

LUST Details

Substance: LUBE OIL
Quantity: 900.00 GALLONS
Media Affected: UNKNOWN
Remed. Status: CONTAMINATION ASSESSMENT

Facility Name : BUILDING 403
Facility Address : 403 BLDG NR POPPING PLNT
Facility City/Zip : HERLONG , CA 96113
County : LASSEN

Vista Number: 1587461
Agency ID: 6T0085A

LUST Details

Substance: DIESEL
Quantity: 5000.00 GALLONS
Media Affected: DRINKING WATER SUPPLY
Remed. Status: REM ACTION PLAN

Facility Name : SIERRA ARMY DEPOT
Facility Address : SIAD SIAD
Facility City/Zip : HERLONG , CA 96113
County : LASSEN

Vista Number: 1588008
Agency ID: 6T0079A

LUST Details

Substance: DIESEL
Media Affected: SOIL/LAND/SAND
Remed. Status: LEAK BEING CONFIRMED

Facility Name : WENDEL YARD/SPTCO
Facility Address : WENDEL LANE
Facility City/Zip : WENDEL , CA 96136
VISTA Enhanced
City/Zip : JANESVILLE , CA 96136
County : LASSEN

Vista Number: 1608528
Agency ID: 6T0043A

LUST Details

Substance: GASOLINE (UNSPECIFIED)
Media Affected: SOIL/LAND/SAND
Remed. Status: CASE CLOSED/CLEANUP COMPL

4 site(s) found in the zip code area(s)

VISTA ENVIRONMENTAL INFORMATION

UST Sites	
Client Project/P.O. No.: 32100-110101	VISTA Report No.: 086488001
Client Reference Name:	Date of Report: Oct. 9, 1995
Site Description	
Subject Property:	SIERRA ARMY DEPOT
Address:	
City:	MILFORD
State:	CA
Zip:	96121
County:	LASSEN
Additional Search Criteria	
City Names:	1) WENDEL 2) HERLONG
Zip Codes:	1) 96136 2) 96113

This database is provided by the State Water Resources Control Board. This database contains information from the:

Aboveground Storage Tank Database	02/95
Underground Storage Tank Registrations Database	01/94

A search of this database revealed the following facilities located in the zip code searched. Also included are sites with incomplete addresses reported to be located in the city searched. If no city name has been reported, the county name was used.

SITES IN ZIP CODE

Facility Name	: JACK MORGAN	Vista Number: 4014956
Facility Address	: 450195 MILL	
Facility City/Zip	: MILFORD , CA	
VISTA Enhanced		
City/Zip	: MILFORD , CA 96121	
County	: LASSEN	

Tank Information

Number of Tanks: Not Reported

Tanks Details

Leak Monitor: UNKNOWN

Facility Name : ROY S. HOOPER
Facility Address : 101 PINE
Facility City/Zip : HERLONG , CA 96113
County : LASSEN

Vista Number: 4012836

Tank Information

Number of Underground Tanks: 1

Tanks Details

Tank Id: 1 U
Tank Contents: OTHER
Tank Size: 1 GALLONS
Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Facility Name : HONEY LAKE WILDLIFE AREA
Facility Address : 728-600 FISH AND GAME RD
Facility City/Zip : WENDEL , CA 96136
VISTA Enhanced
City/Zip : JANESVILLE , CA 96136

Vista Number: 3996048

Tank Information

Number of Tanks: Not Reported

Facility Name : THORTON E. PLUM
Facility Address : A 26 ACCESS
Facility City/Zip : HERLONG , CA 96113
County : LASSEN

Vista Number: 1247709

Tank Information

Number of Underground Tanks: 1

Tanks Details

Tank Id: 1 U
 Tank Contents: LEADED GAS
 Tank Size: 300 GALLONS
 Tank Status: CLOSED & REMOVED
 Tank Material: BARE STEEL
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Facility Name : SIERRA ARMY DEPOT
 Facility Address : AFCOMAC
 Facility City/Zip : HERLONG, CA 96113
 County : LASSEN

Vista Number: 4017850

Tank Information

Number of Underground Tanks: 110

Tanks Details

Tank Id: 117 U
 Tank Contents: PETROLEUM
 Tank Size: 750 GALLONS
 Tank Status: ACTIVE/IN SERVICE
 Tank Material: BARE STEEL
 Pipe Type: BARE STEEL
 Leak Monitor: UNKNOWN

Tank Id: 114 U
 Tank Contents: PETROLEUM
 Tank Size: 1 GALLONS
 Tank Status: ACTIVE/IN SERVICE
 Tank Material: BARE STEEL
 Pipe Type: BARE STEEL
 Leak Monitor: UNKNOWN

Tank Id: 113 U
 Tank Contents: PETROLEUM
 Tank Size: 1000 GALLONS
 Tank Status: ACTIVE/IN SERVICE
 Tank Material: BARE STEEL

SIERRA ARMY DEPOT (continued)

Pipe Type: BARE STEEL
Leak Monitor: UNKNOWN

Tank Id: 112 U
Tank Contents: PETROLEUM
Tank Size: 2000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: BARE STEEL
Leak Monitor: UNKNOWN

Tank Id: 109 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 50 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: OTHER DESCRIPTIONS
Pipe Type: OTHER DESCRIPTIONS
Leak Monitor: MONITOR PRESENT

Tank Id: 108 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 107 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 106 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS

SIERRA ARMY DEPOT (continued)

Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 105 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 104 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 103 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 102 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 101 U

SIERRA ARMY DEPOT (continued)

Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 100 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 99 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 98 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 97 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

SIERRA ARMY DEPOT (continued)

Tank Id: 96 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 95 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 1 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 94 U
Tank Contents: DIESEL
Tank Size: 110 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 93 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 50 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: OTHER DESCRIPTIONS
Pipe Type: OTHER DESCRIPTIONS
Leak Monitor: MONITOR PRESENT

Tank Id: 92 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 50 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: OTHER DESCRIPTIONS

SIERRA ARMY DEPOT (continued)

Pipe Type: OTHER DESCRIPTIONS
Leak Monitor: MONITOR PRESENT

Tank Id: 91 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 50 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: OTHER DESCRIPTIONS
Pipe Type: OTHER DESCRIPTIONS
Leak Monitor: MONITOR PRESENT

Tank Id: 90 U
Tank Contents: DIESEL
Tank Size: 5000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 89 U
Tank Contents: DIESEL
Tank Size: 1000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 88 U
Tank Contents: DIESEL
Tank Size: 550 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 87 U
Tank Contents: DIESEL
Tank Size: 1 GALLONS

SIERRA ARMY DEPOT (continued)

Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 86 U
Tank Contents: DIESEL
Tank Size: 1200 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 85 U
Tank Contents: UNKNOWN
Tank Size: 1 GALLONS
Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 84 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 300 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 83 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 300 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 82 U

SIERRA ARMY DEPOT (continued)

Tank Contents: PETROLEUM
 Tank Size: 300 GALLONS
 Tank Status: CLOSED & REMOVED
 Tank Material: UNKNOWN
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Tank Id: 81 U
 Tank Contents: OIL(NOT SPECIFIED)
 Tank Size: 1 GALLONS
 Tank Status: CLOSED
 Tank Material: UNKNOWN
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Tank Id: 80 U
 Tank Contents: OIL(NOT SPECIFIED)
 Tank Size: 1 GALLONS
 Tank Status: CLOSED
 Tank Material: UNKNOWN
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Tank Id: 79 U
 Tank Contents: OIL(NOT SPECIFIED)
 Tank Size: 1 GALLONS
 Tank Status: CLOSED
 Tank Material: UNKNOWN
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Tank Id: 78 U
 Tank Contents: OTHER
 Tank Size: 1 GALLONS
 Tank Status: CLOSED
 Tank Material: UNKNOWN
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

SIERRA ARMY DEPOT (continued)

Tank Id: 77 U
Tank Contents: DIESEL
Tank Size: 300 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 76 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 600 GALLONS
Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 75 U
Tank Contents: DIESEL
Tank Size: 1 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 74 U
Tank Contents: UNKNOWN
Tank Size: 150 GALLONS
Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 73 U
Tank Contents: DIESEL
Tank Size: 500 GALLONS
Tank Status: CLOSED
Tank Material: OTHER DESCRIPTIONS

SIERRA ARMY DEPOT (continued)

Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 72 U
Tank Contents: DIESEL
Tank Size: 10000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 71 U
Tank Contents: DIESEL
Tank Size: 1500 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: OTHER DESCRIPTIONS
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 70 U
Tank Contents: DIESEL
Tank Size: 1 GALLONS
Tank Status: CLOSED
Tank Material: CONCRETE
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 69 U
Tank Contents: DIESEL
Tank Size: 1 GALLONS
Tank Status: CLOSED
Tank Material: CONCRETE
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 68 U
Tank Contents: DIESEL
Tank Size: 5000 GALLONS

SIERRA ARMY DEPOT (continued)

Tank Status: ACTIVE/IN SERVICE
Tank Material: OTHER DESCRIPTIONS
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 67 U
Tank Contents: DIESEL
Tank Size: 12000 GALLONS
Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 66 U
Tank Contents: DIESEL
Tank Size: 1000 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 65 U
Tank Contents: DIESEL
Tank Size: 500 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 64 U
Tank Contents: DIESEL
Tank Size: 3400 GALLONS
Tank Status: CLOSED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 62 U

SIERRA ARMY DEPOT (continued)

Tank Contents: DIESEL
Tank Size: 3500 GALLONS
Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 61 U
Tank Contents: UNKNOWN
Tank Size: 16000 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: OTHER DESCRIPTIONS
Leak Monitor: MONITOR PRESENT

Tank Id: 60 U
Tank Contents: DIESEL
Tank Size: 1000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 59 U
Tank Contents: DIESEL
Tank Size: 20000 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: MONITOR PRESENT

Tank Id: 58 U
Tank Contents: LEADED GAS
Tank Size: 12000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

SIERRA ARMY DEPOT (continued)

Tank Id: 57 U
Tank Contents: UNLEADED GAS
Tank Size: 12000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 56 U
Tank Contents: DIESEL
Tank Size: 1500 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 55 U
Tank Contents: DIESEL
Tank Size: 800 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 52 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 435 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: CONCRETE
Pipe Type: CONCRETE
Leak Monitor: UNKNOWN

Tank Id: 51 U
Tank Contents: DIESEL
Tank Size: 1000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL

SIERRA ARMY DEPOT (continued)

Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 50 U
Tank Contents: DIESEL
Tank Size: 20000 GALLONS
Tank Status: CLOSED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 49 U
Tank Contents: DIESEL
Tank Size: 16000 GALLONS
Tank Status: CLOSED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 48 U
Tank Contents: DIESEL
Tank Size: 6000 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: BARE STEEL
Pipe Type: OTHER DESCRIPTIONS
Leak Monitor: MONITOR PRESENT

Tank Id: 47 U
Tank Contents: DIESEL
Tank Size: 16000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 46 U
Tank Contents: DIESEL
Tank Size: 275 GALLONS

SIERRA ARMY DEPOT (continued)

Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 45 U
Tank Contents: DIESEL
Tank Size: 35000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 44 U
Tank Contents: DIESEL
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 43 U
Tank Contents: JET FUEL
Tank Size: 8000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: FIBERGLASS
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 42 U
Tank Contents: JET FUEL
Tank Size: 8000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: FIBERGLASS
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 41 U
Tank Contents: DIESEL

SIERRA ARMY DEPOT (continued)

Tank Size: 15000 GALLONS
Tank Status: CLOSED
Tank Material: CONCRETE
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 40 U
Tank Contents: DIESEL
Tank Size: 44000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 39 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 16000 GALLONS
Tank Status: CLOSED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 38 U
Tank Contents: DIESEL
Tank Size: 16000 GALLONS
Tank Status: CLOSED
Tank Material: BARE STEEL
Pipe Type: OTHER DESCRIPTIONS
Leak Monitor: MONITOR PRESENT

Tank Id: 37 U
Tank Contents: DIESEL
Tank Size: 1000 GALLONS
Tank Status: CLOSED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

SIERRA ARMY DEPOT (continued)

Tank Id: 36 U
Tank Contents: DIESEL
Tank Size: 4000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: OTHER DESCRIPTIONS
Leak Monitor: MONITOR PRESENT

Tank Id: 35 U
Tank Contents: DIESEL
Tank Size: 500 GALLONS
Tank Status: CLOSED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 34 U
Tank Contents: DIESEL
Tank Size: 500 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 33 U
Tank Contents: UNLEADED GAS
Tank Size: 500 GALLONS
Tank Status: CLOSED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 32 U
Tank Contents: LEADED GAS
Tank Size: 500 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN

SIERRA ARMY DEPOT (continued)

Leak Monitor: UNKNOWN

Tank Id: 31 U
Tank Contents: UNLEADED GAS
Tank Size: 500 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: BARE STEEL
Pipe Type: OTHER DESCRIPTIONS
Leak Monitor: MONITOR PRESENT

Tank Id: 30 U
Tank Contents: DIESEL
Tank Size: 3500 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 29 U
Tank Contents: DIESEL
Tank Size: 1000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 28 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 550 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 27 U
Tank Contents: DIESEL
Tank Size: 1500 GALLONS
Tank Status: ACTIVE/IN SERVICE

SIERRA ARMY DEPOT (continued)

Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 26 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 280 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 25 U
Tank Contents: DIESEL
Tank Size: 10000 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 24 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 280 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 23 U
Tank Contents: DIESEL
Tank Size: 3000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 22 U
Tank Contents: DIESEL

SIERRA ARMY DEPOT (continued)

Tank Size: 7500 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 21 U
Tank Contents: DIESEL
Tank Size: 7500 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: BARE STEEL
Pipe Type: OTHER DESCRIPTIONS
Leak Monitor: MONITOR PRESENT

Tank Id: 20 U
Tank Contents: DIESEL
Tank Size: 500 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 19 U
Tank Contents: DIESEL
Tank Size: 500 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 18 U
Tank Contents: DIESEL
Tank Size: 500 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

SIERRA ARMY DEPOT (continued)

Tank Id: 17 U
Tank Contents: DIESEL
Tank Size: 500 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 16 U
Tank Contents: DIESEL
Tank Size: 500 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 15 U
Tank Contents: DIESEL
Tank Size: 500 GALLONS
Tank Status: CLOSED
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 14 U
Tank Contents: DIESEL
Tank Size: 7500 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 13 U
Tank Contents: DIESEL
Tank Size: 6000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN

SIERRA ARMY DEPOT (continued)

Leak Monitor: UNKNOWN

Tank Id: 12 U
Tank Contents: DIESEL
Tank Size: 1000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 11 U
Tank Contents: DIESEL
Tank Size: 1000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 10 U
Tank Contents: DIESEL
Tank Size: 7500 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 9 U
Tank Contents: DIESEL
Tank Size: 1000 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: BARE STEEL
Pipe Type: OTHER DESCRIPTIONS
Leak Monitor: MONITOR PRESENT

Tank Id: 8 U
Tank Contents: DIESEL
Tank Size: 12000 GALLONS
Tank Status: ACTIVE/IN SERVICE

SIERRA ARMY DEPOT (continued)

Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 7 U
Tank Contents: DIESEL
Tank Size: 6000 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: BARE STEEL
Pipe Type: BARE STEEL
Leak Monitor: MONITOR PRESENT

Tank Id: 6 U
Tank Contents: DIESEL
Tank Size: 500 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 5 U
Tank Contents: DIESEL
Tank Size: 550 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 4 U
Tank Contents: OIL(NOT SPECIFIED)
Tank Size: 550 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 3 U
Tank Contents: LEADED GAS

SIERRA ARMY DEPOT (continued)

Tank Size: 8000 GALLONS
 Tank Status: ACTIVE/IN SERVICE
 Tank Material: BARE STEEL
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Tank Id: 2 U
 Tank Contents: DIESEL
 Tank Size: 8000 GALLONS
 Tank Status: ACTIVE/IN SERVICE
 Tank Material: BARE STEEL
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Tank Id: 1 U
 Tank Contents: UNLEADED GAS
 Tank Size: 8000 GALLONS
 Tank Status: ACTIVE/IN SERVICE
 Tank Material: BARE STEEL
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Facility Name : SCHOOL APARTMENTS
 Facility Address : COR OF PLUMAS & SUSA
 Facility City/Zip : HERLONG , CA 96113
 County : LASSEN

Vista Number: 1252657

Tank Information

Number of Underground Tanks: 1

Tanks Details

Tank Id: 1 U
 Tank Contents: UNLEADED GAS
 Tank Size: 550 GALLONS
 Tank Status: ACTIVE/IN SERVICE
 Tank Material: UNKNOWN
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Facility Name : SIERRA HIGH SCHOOL
Facility Address : D S HALL
Facility City/Zip : HERLONG , CA 96113
County : LASSEN

Vista Number: 4024965

Tank Information

Number of Underground Tanks: 2

Tanks Details

Tank Id: 2 U
Tank Contents: UNKNOWN
Tank Size: 10000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: MONITOR PRESENT

Tank Id: 1 U
Tank Contents: LEADED GAS
Tank Size: 500 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: MONITOR PRESENT

Facility Name : HERLONG MIDDLE SCHOOL
Facility Address : D S HALL
Facility City/Zip : HERLONG , CA 96113
County : LASSEN

Vista Number: 1254653

Tank Information

Number of Underground Tanks: 2

Tanks Details

Tank Id: 2 U
Tank Contents: DIESEL
Tank Size: 3000 GALLONS
Tank Status: ACTIVE/IN SERVICE

HERLONG MIDDLE SCHOOL (continued)

Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 1 U
Tank Contents: DIESEL
Tank Size: 2000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Facility Name : CHURCH OF JESUS CHRIST OF
Facility Address : HERLONG ACCESS
Facility City/Zip : HERLONG , CA 96113
County : LASSEN

Vista Number: 4029588

Tank Information

Number of Underground Tanks: 2

Tanks Details

Tank Id: 2 U
Tank Contents: DIESEL
Tank Size: 550 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: BARE STEEL
Leak Monitor: UNKNOWN

Tank Id: 1 U
Tank Contents: DIESEL
Tank Size: 550 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: BARE STEEL
Leak Monitor: UNKNOWN

Facility Name : LAUFMAN RANGER STATION
 Facility Address : HIGHWAY 395
 Facility City/Zip : MILFORD , CA 96121
 County : LASSEN

Vista Number: 1258036

Tank Information

Number of Underground Tanks: 1

Tanks Details

Tank Id: 1 U
 Tank Contents: UNLEADED GAS
 Tank Size: 1000 GALLONS
 Tank Status: ACTIVE/IN SERVICE
 Tank Material: UNKNOWN
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Facility Name : PLUMAS-SIERRA RURAL ELECTRIC
 Facility Address : HWY 395 1 MI S OF MI
 Facility City/Zip : MILFORD , CA 96121
 County : LASSEN

Vista Number: 1225660

Tank Information

Number of Underground Tanks: 1

Tanks Details

Tank Id: 1 U
 Tank Contents: UNLEADED GAS
 Tank Size: 1000 GALLONS
 Tank Status: CLOSED
 Tank Material: UNKNOWN
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Facility Name : THE MARK
 Facility Address : N HWY 395 PO BOX 68
 Facility City/Zip : HERLONG , CA 96113
 County : LASSEN

Vista Number: 1244292

Tank Information

Number of Underground Tanks: 5

Tanks Details

Tank Id: 5 U
Tank Contents: UNKNOWN
Tank Size: 1000 GALLONS
Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 4 U
Tank Contents: UNKNOWN
Tank Size: 1000 GALLONS
Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 3 U
Tank Contents: UNLEADED GAS
Tank Size: 1000 GALLONS
Tank Status: CLOSED
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 2 U
Tank Contents: UNLEADED GAS
Tank Size: 12000 GALLONS
Tank Status: CLOSED & REMOVED
Tank Material: BARE STEEL
Pipe Type: BARE STEEL
Leak Monitor: UNKNOWN

Tank Id: 1 U
Tank Contents: UNLEADED GAS
Tank Size: 12000 GALLONS
Tank Status: CLOSED & REMOVED

THE MARK (continued)

Tank Material: BARE STEEL
Pipe Type: BARE STEEL
Leak Monitor: UNKNOWN

Facility Name : LAUFMAN RANGER STATION
Facility Address : 159 LAWRENCE
Facility City/Zip : MILFORD , CA 96121
County : LASSEN

Vista Number: 1255025

Tank Information

Number of Underground Tanks: 4

Tanks Details

Tank Id: 4 U
Tank Contents: LEADED GAS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 3 U
Tank Contents: UNKNOWN
Tank Size: 550 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 2 U
Tank Contents: UNKNOWN
Tank Size: 550 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: BARE STEEL
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

Tank Id: 1 U

LAUFMAN RANGER STATION (continued)

Tank Contents: UNKNOWN
 Tank Size: 550 GALLONS
 Tank Status: ACTIVE/IN SERVICE
 Tank Material: BARE STEEL
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Facility Name : RESIDENCE
 Facility Address : 117 MANZANITA
 Facility City/Zip : HERLONG , CA 96113
 County : LASSEN

Vista Number: 4034202

Tank Information

Number of Underground Tanks: 1

Tanks Details

Tank Id: 1 U
 Tank Contents: LEADED GAS
 Tank Size: 288 GALLONS
 Tank Status: CLOSED
 Tank Material: BARE STEEL
 Pipe Type: UNKNOWN
 Leak Monitor: UNKNOWN

Facility Name : WENDEL YARD
 Facility Address : WENDELYARD
 Facility City/Zip : WENDEL , CA 96136
 VISTA Enhanced
 City/Zip : JANESVILLE , CA 96136
 County : LASSEN

Vista Number: 1246884

Tank Information

Number of Underground Tanks: 1

Tanks Details

Tank Id: 1 U
 Tank Contents: LEADED GAS

WENDEL YARD (continued)

Tank Size: 1000 GALLONS
Tank Status: ACTIVE/IN SERVICE
Tank Material: UNKNOWN
Pipe Type: UNKNOWN
Leak Monitor: UNKNOWN

15 site(s) found in the zip code area(s)

VISTA ENVIRONMENTAL INFORMATION

Spills Sites	
Client Project/P.O. No.: 32100-110101	VISTA Report No.: 086488001
Client Reference Name:	Date of Report: Oct. 9, 1995
Site Description	
Subject Property:	SIERRA ARMY DEPOT
Address:	
City:	MILFORD
State:	CA
Zip:	96121
County:	LASSEN
Additional Search Criteria	
City Names:	1) WENDEL 2) HERLONG
Zip Codes:	1) 96136 2) 96113

This database is provided by the Office of Emergency Services. This database contains information from the:

California Hazardous Materials Incident Report	12/90
Orange County-Industrial Cleanups	05/95
Region #1-Active Toxic Site Investigations-Spills	07/95
San Diego County Environmental Health Services Database-Spill Sites	05/95

SITES IN ZIP CODE

0 site(s) found in the zip code area(s)

VISTA ENVIRONMENTAL INFORMATION

Solid Waste Sites

Client Project/P.O. No.:	32100-110101	VISTA Report No.:	086488001
Client Reference Name:		Date of Report:	Oct. 9, 1995

	Site Description
Subject Property:	SIERRA ARMY DEPOT
Address:	
City:	MILFORD
State:	CA
Zip:	96121
County:	LASSEN

	Additional Search Criteria
City Names:	1) WENDEL 2) HERLONG
Zip Codes:	1) 96136 2) 96113

This database is provided by the Integrated Waste Management Board. This database contains information from the:

Ca Solid Waste Information System (SWIS)	03/95
San Diego County Environmental Health Services Database-Solid Waste Sites	05/95

The California Solid Waste Information System (SWIS) database consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations pursuant to the Solid Waste Management and Resource Recovery Act of 1972, Government Code Section 2.66790(b). Generally, the California Integrated Waste Management Board learns of locations of disposal facilities through permit applications and from local enforcement agencies.

A search of this database revealed the following facilities located in the zip code searched. Also included are sites with incomplete addresses reported to be located in the city searched. If no city name has been reported, the county name was used.

SITES IN ZIP CODE

Facility Name	: SIERRA ARMY DEPOT	Vista Number:	1185910
Facility Address	: ADJACENT TO RR; 1 MI N OF HERLONG	Agency ID:	18-AA-0013
Facility City/Zip	: HERLONG , CA		
VISTA Enhanced			
City/Zip	: HERLONG , CA 96113		
County	: LASSEN		

GLOSSARY

Description of Report:

This report is a compilation of federal environmental data which identifies environmental problem sites and activities from the records of the United States Environmental Protection Agency(US EPA). The data contained in this report are the result of a search of VISTA's proprietary database.

The VISTA database search is designed to identify all sites known to be located within the specified zip code(s). Because not all government records have complete and accurate addresses, VISTA uses Post Office verification software to assign or to correct zip codes where necessary. For those records which cannot be assigned a zip code, VISTA uses the specified city name(s) to identify any sites which may be located in the zip code area. If no city name is reported, the county name is used.

Limitations Of Information

All information contained in this report was obtained from US EPA records. VISTA does not warrant the accuracy, timeliness, merchantability, completeness or usefulness of any information furnished, and the subscriber accepts any and all risks resulting from decisions made solely or in part on VISTA information.

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FOR MORE INFORMATION CALL (619)450-6100

5060 Shoreham Place, Suite 300, San Diego, CA 92122

APPENDIX B

**IT CORPORATION 1988 ASBESTOS SAMPLING RESULTS
FOR BUILDINGS IN THE HERLONG PARCEL**

TABLE 31
 ASBESTOS SURVEY - SIERRA ARMY DEPOT
 BUILDING NUMBER 170

Sample I.D.	Room No.	Location	Description	Type	X	Perible (Yes/No)	RAS
170-A	Mechanical	Air duct	White plaster tape	ND		No	0
170-B	Mechanical	Angle of hot water supply pipe	White plaster-like insulation	ND		Yes	0
170-C	Mechanical	Joint of 5" & 8" pipes	White plaster-like insulation	ND		Yes	0
170-D	Mechanical	Debris on chilled water pump	Gray chunk of insulation	ND		Yes	0
170-E	Nave, E. storage room	Above plenum access	Drywall	ND		Yes	0
170-F	Nave, E. storage room	Above plenum access	Drywall tape	ND		Yes	0
170-G	Nave, E. storage room	Floor by door	1' x 1' floor tile, beige with brown streaks	ND		No	0
170-H	Coat room	Floor by door	1' x 1' floor tile, beige with brown & white streaks	ND		No	0
170-I	Corridor	Outside coat room	2' x 4' white ceiling tile	ND		Yes	0
170-J	S. storage area	Floor by door	1' x 1' floor tile, pink with gray brown streaks	C	10	No	0
170-K	Roof	NE corner	Felt/tar material	ND		No	0

RAS - RISE ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CHRYSOTILE ASBESTOS

TR - TRACE

TABLE 71
 ASBESTOS SURVEY - SIBREA ARMY DEPOT
 BUILDING NUMBER 1010

Sample I.D.	Room No.	Location	Description	Type	Σ	Friable (Yes/No)	ΣAS
1010-A	Classroom # 1	Floor at tile edge	1' x 1' floor tile, dark brown	ND		No	0
1010-B	Classroom # 1	Floor at tile edge	Sheeting floor tile, light brown	ND		No	0
1010-C	Mechanical	Insulated tank	White plaster-like insulation	C	21	Yes	10
1010-D	Mechanical	Insulated tank	White plaster-like	A	20	Yes	10
1010-E	NE storage	S. wall	Wallboard	ND		Yes	0
1010-F-1	Classroom # 1	Pipe at ceiling, NW corner	Corrugated insulation	C	25	Yes	20
1010-G	Attic	Above access door	"Cotton Ball" insulation	ND		Yes	0
1010-H	Classroom # 1	Ceiling	Pressboard appearance	NL		Yes	.
1010-I	Roof	Over B. door	Green tar/felt shingles	ND		Yes	0
No sample. Ref # 60-A	Exterior	Walls	Transite shingles	C	4	No	0

TABLE 72
 ASBESTOS SURVEY - SIBERA ARMY DEPOT
 BUILDING NUMBER 1019

Sample I.D.	Room No.	Location	Description	Type	X	Friable (Yes/No)	RAS
1019-A	Exterior	Walls	Transite shingles	C	15	No	0
1019-B	Roof	W. edge	Gray felt/tar shingles	ND		Yes	0
1019-C-1	Basement crawl space	At access, W. of main entrance	White plaster-like insulation	A	19	Yes	12
1019-D	Basement crawl space	At access, W. of main entrance	White plaster-like insulation	A	20	Yes	12
1019-E	Bowling alley	Floor, N. side	Sheeting floor tile, green.	ND		No	0
1019-F	Bowling alley	Baseboard N. wall	Brown vinyl	ND		No	0
1019-G	Bowling alley	Diagonal roof brace	1' x 1' ceiling tile	ND		Yes	0
1019-H	Bar office	E. wall	Drywall	ND		Yes	0
1019-I	Bowling alley	S. wall	1' x 1' floor tile, light brown	ND		No	0
1019-J	Lounge	Ceiling at Men's room	1' x 1' acoustic tile	ND		Yes	0
1019-K	Men's room	Floor by S. wall	1' x 1' floor tile, tan with brown streaks	ND		No	0
1019-L	Attic	By N. access in lounge	Black felt sheets	ND		Yes	0
1019-M	Basement crawl space	Closest of three grouped lines	Corrugated pipe insulation	C	29	Yes	6
1019-N	Basement crawl space	Middle of three grouped lines	Corrugated pipe insulation	C	32	Yes	6
1019-O	Basement crawl space	E. elbow on closest of three grouped lines	Corrugated pipe insulation	A C	9 14	Yes	6
1019-F	Basement crawl space	E. elbow on middle of three grouped lines	Corrugated pipe insulation	A C	8 14	Yes	6

RAS - RISE ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CHRYSOTILE ASBESTOS

TE - TRACE

TABLE 72
 ASBESTOS SURVEY - SIERRA ARMY DEPOT
 BUILDING NUMBER 1019

Sample I.D.	Room No.	Location	Description	Type	2	Friable (Yes/No)	BAS
1019-Q	No sample						
1019-B	Lounge	Floor behind counter	Sheeting floor tile. red brick pattern	C	19	No	C

TABLE 73
 ASBESTOS SURVEY - SIERRA ARMY DEPOT
 BUILDINGS NUMBER 1101, 1120

Sample I.D.	Room No.	Location	Description	Type	%	Printable (Yes/No)	RAS
1110-A	Kitchen	Kitchen by refrigerator	Sheeting floor tile, yellow & green	C	26	No	0
1110-B	Hallway	Floor by doors	1' x 1' floor tile. white with gray streaks	ND		No	0
1110-C	Roof	Roof above front door	Black textured tar shingles	ND		Yes	0
1110-D	Carport roof	Over carport	Rock tar roof	ND		No	0
1110-E	Furnace	Left wall	Drywall	ND		Yes	0

RAS - RISK ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CHRYSOTILE ASBESTOS

TR - TRACE

TABLE 75
 ASBESTOS SURVEY - SIBBBA ARMY DEPOT
 BUILDING NUMBER 1202

Sample I.D.	Room No.	Location	Description	Type	%	Friable (Yes/No)	BAS
1202-A	Boiler	S. wall	Tape	ND		Yes	0
1202-B	Boiler	N. wall	Tape	ND		Yes	0
1202-C	Boiler	Boiler & heat exchanger	White plaster-like insulation	A C	13 23	Yes	6
1202-D	Boiler	Vertical pipe run against E. wall	White plaster-like insulation	A C	11 8	Yes	4
1202-E	Hallway, 1st floor	Pipe overhead at S. end	White plaster-like insulation	A C	36 22	Yes	21
1202-F	Hallway, 1st floor	Elbow overhead at S. end	White plaster-like insulation	A C	8 TB - 1	Yes	12
1202-G	1st floor bathroom	Floor near shower	1' x 1' floor tile, white with gray streaks	ND		No	0
1202-H	2nd room N. of SW corner	Exposed pipe lagging	Corrugated insulation	C	34	Yes	10
1202-I	Stairway	Exhaust duct in ceiling	Fiberglass insulation	ND		Yes	0
1202-J	Exterior	Walls	Felt behind wall shingles	ND		Yes	0
No sample, Ref # 1204-C	Exterior	Walls	Transite Shingles	C	17	No	0
No sample, Ref # 74-A	Roof	N/A	Green tar/felt roof shingles	ND		Yes	0

BAS - RISK ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CHRYSOTILE ASBESTOS

TB - TRACE

TABLE 76
 ASBESTOS SURVEY - SIERRA ARMY DEPOT
 BUILDING NUMBER 1203

Sample I.D.	Room No.	Location	Description	Type	%	Friable (Yes/No)	RAS
1203-A	Boiler	Heat exchanger & furnace jackets	White plaster-like insulation	A C	14 4	Yes	44
1203-B	Hallway, 1st floor	Floor by soda machine	Sheeting floor tile, gray	ND		No	0
1203-C	Shower, 1st floor	Floor by shower drain	9" x 9" floor tile, reddish-brown	ND		No	0
No sample, Ref # 1202-E	Hallway & bedrooms	Radiator supply pipe	White plaster-like	A C	36 22	Yes	33
No sample, Ref # 1204-B	Exterior walls	N/A	Pink transite shingles	C	17	No	0

RAS - RISK ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CHRYSOCTILE ASBESTOS

TB - TRACE

TABLE 77
 ASBESTOS SURVEY - SIERRA ARMY DEPOT
 BUILDING NUMBER 1204

Sample I.D.	Room No.	Location	Description	Type	Σ	Prable (Yes/No)	BAS
1204-A	Boiler room	Pipe next to furnace	Corrugated pipe insulation	C	74	Yes	24
1204-B	Hallway	Ceiling by S. door	Fibrous ceiling material	ND		Yes	0
1204-C	Exterior	Wall, NE corner	Pink transite shingles	C	17	No	0
No sample. Ref # 1204-C	Boiler room	Boiler & heat exchanger jackets	White plaster-like insulation	A	13	Yes	40
				C	23		

BAS - BASE ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - ANOSITE ASBESTOS

C - CHRYSOTILE ASBESTOS

TR - TRACE

TABLE 80
ASBESTOS SURVEY - SIBRA ARMY DEPOT
BUILDING NUMBER 1217

Sample I.D.	Room No.	Location	Description	Type	%	Friable (Yes/No)	BAS
1217-A	Games room	Floor by E. wall	1'x 1' floor tile, gray with white specks	ND		No	0
1217-B	Disco	Vertical pipe, SE corner	Yellow fibrous insulation	ND		Yes	0
1217-C	SW office	Vertical pipe run by door	White plaster-like insulation	A	28	Yes	16
1217-D	Boiler	Horizontal pipe near smaller tank	Corrugated pipe insulation	C	43	Yes	28
1217-E	Boiler	Smaller tank insulation	Cloth over fiberglass	ND		Yes	0
1217-F	E. side mechanical	Valve elbow against wall	White plaster-like insulation	A C	3 2	Yes	14
1217-G	Boiler	Gasket on pipe by smaller tank	Black felt gasket	C	94	Yes	15
1217-H	Mess hall	Floor by W. wall	9" x 9" floor tile, green	ND		No	0
1217-I	Kitchen	Pipe next to large oven	White plaster-like insulation	C	32	Yes	36
No sample. Ref # 60-A	Exterior	Walls	Transite shingles	C	4	No	0
No sample. Ref # 74-A	Roof	N/A	Tar/felt shingles	ND		Yes	0

BAS - RISE ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CHRYSOTILE ASBESTOS

TR - TRACE

TABLE 82
ASBESTOS SURVEY - SIBERRA ARMY DEPOT
BUILDING NUMBER 1223

Sample I.D.	Room No.	Location	Description	Type	%	Friable (Yes/No)	BAS
1223-A	Women's room	Baseboard under sink	Brown vinyl	ND		No	0
1223-B	Women's room	Floor by entrance	1' x 1' floor tile, tan with brown streaks	ND		No	0
1223-C	Main office	Ceiling, at crack by window	Textured ceiling	ND		Yes	0
1223-D	Main office	Ceiling, near restroom door	Textured ceiling	ND		Yes	0
1223-E	Main office	Ceiling, at water damaged area	Textured ceiling	ND		Yes	0
1223-F	S. office	Ceiling, above table	Textured ceiling	ND		Yes	0
1223-G	Hallway	Ceiling, near janitor's closet	Textured ceiling	ND		Yes	0
1223-H	Storage	Near ceiling in SW corner	Drywall	ND		Yes	0
1223-I	Attic	Pipe above B. office	Fibrous pipe insulation	NC		Yes	0
1223-J	Storage	Floor by door	1' x 1' floor tile, brown	ND		No	0
1223-K	Janitor's room	Floor by door	Sheeting floor tile, brown with turquoise pattern	ND		No	0
1223-L-1	Attic	Above B. office	Fibrous blanket insulation	ND		Yes	0
1223-M	Mechanical	Furnace duct	Fibrous blanket insulation	ND		Yes	0
1223-N	Exterior	Wall by B. entrance	Transite shingles	C	6	No	0
1223-O	Exterior	Caulking around B. door	Gray sealant	ND		No	0
1223-P	Roof	Over SE exit	Green felt/tar shingles	ND		Yes	0

BAS - RISK ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CHRYSOTILE ASBESTOS

TE - TRAC

TABLE 83
ASBESTOS SURVEY - SIERA ARMY DEPOT
BUILDING NUMBER 2067

Sample I.D.	Room No.	Location	Description	Type	%	Friable (Yes/No)	RAS
2067-A	Post Office Lobby	Floor by door to corridor	1' x 1' floor tile, white with black or gray streaks	ND		No	0
2067-B	Corridor N. of Post Office	Near front E. door	Sheeting floor tile, mottled gray & green	ND		No	0
2067-C	Central NS running corridor	Floor, near soda machine behind bank	9" x 9" floor tile, black	C	4	No	0
2067-D	Lobby	Floor by women's bathroom near library	Sheeting floor tile, brown	ND		No	0
2067-E	Lobby corridor outside barber shop	Floor near barber shop door	Sheeting floor tile, mottled green	ND		No	0
2067-F	Heater room at NE area of bldg.	Hot water tank in SW corner of room	Corrugated cardboard wrap	C	90	Yes	72
2067-G	Heater room at NE area of bldg.	S. wall in SW area of room	4" plaster-like pipe lagging	A	16	Yes	36
2067-H	Heater room at NE area of bldg.	Square duct near middle of room	White cloth duct tape	ND		Yes	0
2067-I	Post Office	Floor, near W wall behind counter near window	9" x 9" Floor tile, white with gray or black streaks	ND		No	0
2067-J	ACS storage N. of Post Office	Floor near door	1' x 1' floor tile, beige with black & white streaks	ND		No	0
2067-K	Store room N. of ACS offices	Floor near door	1' x 1' floor tile, beige with light & dark specks	ND		No	0
2067-L	Crawlspace in corridor near ACS offices	Square duct in crawlspace	Corrugated cardboard duct wrap	C	66	Yes	60

RAS - RISK ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CHRYTOSILE ASBESTOS

TR - TRACE

TABLE 83
 ASBESTOS SURVEY - SIERRA ARMY DEPOT
 BUILDING NUMBER 2067

Sample I.D.	Room No.	Location	Description	Type	S	Friable (Yes/No)	RAS
2067-M	Crawlspace in corridor near ACS offices	Ceiling in crawlspace	Black fibrous insulation pads	ND		Yes	0
2067-N	Men's bathroom, near library	Floor near door	Sheeting floor tile, mottled green & brown	ND		No	0
2067-O	Store room of variety store	Square duct near ceiling	Corrugated cardboard duct wrap	C	92	Yes	54
2067-P	Store room of variety store	Floor near door	Sheeting floor tile, green	ND		No	0
2067-Q	Bank	Ceiling	2' x 4' ceiling tiles, white	ND		Yes	0
2067-R	Bank store room	Floor near N. wall	1' x 1' floor tile, brown with light & dark specks	ND		No	0
2067-S	Library	Square duct in crawlspace by office in NW area of library	Gray air duct panels, paper-like	C	44	Yes	14
2067-T	Library	Square duct in crawlspace by office in NW area of library	Gray air duct panels, paper-like	C	54	Yes	21
2067-U	Men's bathroom at NW corner of gym	Upper S. wall	3" plaster-like pipe lagging	A C	16 6	Yes	48
2067-V	Men's bathroom at NW corner of gym	Shower stall wall	Orange & cream painted wallboard	C	16	No	0
2067-W	Roof	NW corner of library	Flat silver roof	C	54	No	0
2067-X	Roof	Over gym, women's bathroom	Tar-like shingles	ND		No	0
No sample. Ref # 2067-F	Crawlspace in corridor near ACS offices	Pipe in crawlspace	4" corrugated cardboard lagging	C	> 50	Yes	24

RAS - RISK ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CHRYSOTILE ASBESTOS

TR - TRAC

TABLE 85
ASBESTOS SURVEY - SIERRA ARMY DEPOT
BUILDING NUMBER 2069

Sample I.D.	Room No.	Location	Description	Type	%	Friable (Yes/No)	RAS
2069-A	W. storage	Wall at damaged area	Drywall	ND		Yes	0
2069-B	Market	Floor by tile transition	9" x 9" floor tile, black with white stripes	ND		No	0
2069-C	Market	Floor by doorway to storage	Sheeting floor tile, yellow	C	8	No	0
2069-D	Office B. of market	Ceiling	Suspended ceiling tile	ND		No	0
2069-E	Admin Office, CFAD	Pipes on W. wall	White plaster-like insulation	A	28	Yes	2
2069-F	Office on S. side	Floor in SW corner	9" x 9" floor tile, tan with brown streaks	C	TR < 1	No	0
2069-G	Women's room	Floor at entrance	1' x 1' floor tile, tan with brown streaks	ND		No	0
2069-H	Storage Office	Wall, 2' high, by heater	Drywall	ND		Yes	0
2069-I	Hallway	Floor by doorway	9" x 9" floor tile, white with copper streaks	C	TR < 1	No	0
2069-J	Mechanical	Large duct jacket	White plaster-like insulation	A C	22 8	Yes	30
2069-K	Mechanical	Boiler jacket	White plaster-like insulation	C	10	Yes	12
2069-L	Mechanical	Vertical pipe by S. wall	Corrugated pipe insulation	C	62	Yes	24
2069-M	Mechanical	Horizontal pipe by S. wall	White plaster-like insulation	A A	14 2	Yes	42
2069-N	Thrift shop	Floor in back office	1' x 1' floor tile, tan with brown specks	ND		No	0

RAS - RISK ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CHRYCOTILE ASBESTOS

TR - TRACE

TABLE 85
 ASBESTOS SURVEY - SIERRA ARMY DEPOT
 BUILDING NUMBER 2069

Sample I.D.	Room No.	Location	Description	Type	X	Friable (Yes/No)	RAS
2069-0	Thrift shop	Floor in storage closet	9" x 9" floor tile, white with gray streaks	ND		No	0
2069-P	Thrift shop	Floor in storage warehouse	1' x 1' floor tile, brown with white streaks	ND		No	0
No sample, Ref # 60-A	Exterior. N. end addition	Walls	Transite shingles	C	4	No	0

TABLE 86
ASBESTOS SURVEY - SIBBERA ARMY DEPOT
BUILDING NUMBER 2071

Sample I.D.	Room No.	Location	Description	Type	X	Privable (Yes/No)	RAS
2071-A	Exterior walls	NE corner	Transite shingles	C	12	No	0
2071-B	Roof	NE overhang	Rock/tar roof	ND		No	0
2071-C	Foyer	Outside women's room	1' x 1' floor tile, tan	ND		No	0
2071-D	Women's restroom entryway	Ceiling by door	2' x 1' white acoustic tile	ND		Yes	0
2071-E	Hallway	Ceiling by women's bathrooms	1' x 1' acoustic tile	ND		Yes	0
2071-F	Main theater	E. wall near doorway from lobby	1' x 1' acoustic tile with regular holes	ND		Yes	0
2071-G	Main theater	E. wall	1' x 1' acoustic tile with irregular holes	ND		Yes	0
2071-H	Main theater	Cover on stair to stage	Brown vinyl	ND		No	0
2071-I	Stage	Curtain	Flame resistant fabric	ND		Yes	0
2071-J	Stage	S. furnace against wall	Vibration dampening gasket	ND		Yes	0
2071-K	Main theater	W. end of S. floor runner	Brown vinyl mat	ND		No	0
2071-L	Projection	Floor near stairway	Vinyl mat	ND		No	0
2071-M	Projection	S. wall	Drywall	C	10	Yes	22
2071-N	1st floor office	Floor by safe	Sheeting floor tile, brown with turquoise	ND		No	0
2071-O-1	Foyer	Horizontal pipes E. of snack bar	Corrugated pipe insulation	C	42	Yes	52

BAS - RISK ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CHRYSOTILE ASBESTOS

TR - TRACE

TABLE 86
ASBESTOS SURVEY - SIERRA ARMY DEPOT
BUILDING NUMBER 2071

Sample I.D.	Room No.	Location	Description	Type	S	Friable (Yes/No)	RAS
2071-P-1	Foyer	Elbow on pipes E. of snack bar	White plaster-like insulation	A C	8 9	Yes	64
2071-Q	Foyer	Pipe over office door	Corrugated pipe insulation	C	33	Yes	52
2071-R	1st floor office	Pipe insulation at "T"	White plaster-like insulation	A	12	Yes	22
2071-S	Foyer	Elbow on pipe, over snack bar	White plaster-like insulation	A	12	Yes	64
2071-T	Projection	Pipe against N. wall	White plaster-like insulation	C	17	Yes	12
2071-U	N. Storage room	Pipe on ceiling	White plaster-like insulation	C	33	Yes	10
2071-V	S. Storage room	Pipe by radiator	Corrugated insulation	C	35	Yes	84
2071-W	Speaker room	Door	Drywall	ND		Yes	0
2071-X	Mechanical room	Pipe over door to speaker	Corrugated insulation	C	34	Yes	12
No sample, Ref # 74-A	Roof	Roof	Red tar/felt panels	ND		Yes	0

RAS - RISK ASSESSMENT SCORE ND - NO ASBESTOS DETECTED A - AMOSITE ASBESTOS C - CHRYSOTILE ASBESTOS TB - TRACE

TABLE 81
ASBESTOS SURVEY - SIERRA ARMY DEPOT
BUILDING NUMBER 2072

Sample I.D.	Room No.	Location	Description	Type	%	Friable (Yes/No)	RAS
No sample, Ref # 74-A	Roof	Roof	Red tar/felt panels	ND		Yes	0

RAS - RISK ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CHRYSOTILE ASBESTOS

TR - TRACE

TABLE 29
 ASBESTOS SURVEY - SIERRA ARMY DEPOT
 BUILDING NUMBER 165

Sample I.D.	Room No.	Location	Description	Type	3	Friable (Yes/No)	RAS
165-A	Boiler room	Lower pipe elbow	White pipe insulation	ND		Yes	0
165-B	Boiler room	Upper pipe elbow	White pipe insulation	ND		Yes	0
165-C	Boiler room	Boiler jacket	White insulation	ND		Yes	0
165-D	Boiler room	Debris from ceiling	Drywall	ND		Yes	0
165-E	Boiler room	"T" pipe joint next to boiler	White insulation	NE		Yes	0
165-F	Boiler room	Pipe jacket at valve	White chalky insulation	ND		Yes	0
165-G	SW corner office	Floor by door	Brown with yellow & black streaks	ND		No	0
165-H	Dining room	Floor by tile border	1' x 1' floor tile, white with black streaks	NE		No	0
165-I	Assembly room	Ceiling at SW corner	Suspended ceiling tile	ND		Yes	0
165-J	Supply room	Floor by door	1' x 1' floor tile, brown with white streaks	ND		No	0
165-K	Roof	Over assembly area	Brown shingles	ND		Yes	0

RAS - RISK ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - AMOSITE ASBESTOS

C - CROSYOTILE ASBESTOS

TE - T

TABLE 30
 ASBESTOS SURVEY - SIERRA ARMY DEPOT
 BUILDINGS NUMBER 166,167,168

Sample I.D.	Room No.	Location	Description	Type	Y	Frivable (Yes/No)	RAS
167-A	"D" unit, laundry	Floor by door	1' x 1' floor tile, tan with white streaks	ND		No	0
167-B	"D" unit, lounge	Ceiling, NW corner	1' x 1' ceiling tiles	ND		Yes	0
167-C	"A" unit, lounge	Ceiling	1' x 1' ceiling tiles (same as 167-B)	ND		Yes	0
No sample, Ref # 165-A	Roof	N/A	Brown shingles	ND		Yes	0

RAS - RISK ASSESSMENT SCORE

ND - NO ASBESTOS DETECTED

A - ANOSITE ASBESTOS

C - CHRYSOTILE ASBESTOS

TR - TRACE

APPENDIX C

**LEAD PAINT ANALYSIS
FOR THE SIERRA ARMY DEPOT**

3/20/96
Jon
John
Colberg

HENRICI WATER LABORATORY
1832 BUTTERFLY VALLEY ROAD, QUINCY, CALIFORNIA 95971
PHONE (916) 281-6588

February 22, 1994

Commander - Sierra Army Depot
SDSSI-ENV
Herlong, CA 96113

RE: Lead paint analysis from the Sierra Army Depot

Sample	Location	Date	Time	Sampler
R344	1120B Lassen, front door	12/08/93		H.W.L.
R345	1120B Lassen, back door	12/08/93		H.W.L.
R346	1120B Lassen, back fence	12/08/93		H.W.L.
R347	1120B Lassen, shelf	12/08/93		H.W.L.
R348	1120B Lassen, window	12/08/93		H.W.L.
R349	Amadee playground swing	12/15/93		H.W.L.
R350	Amadee Merry-go-round	12/15/93		H.W.L.
R351	191B Scadaddle, window	12/15/93		H.W.L.
R352	191B Scadaddle, front door	12/15/93		H.W.L.
R353	191B Scadaddle, back door	12/15/93		H.W.L.
R354	191B Scadaddle, fence	12/15/93		H.W.L.
R355	191B Scadaddle, closet	12/15/93		H.W.L.
R356	23 Circle, back door	01/25/94		Purveyor
R357	23 Circle, front door	01/25/94		Purveyor
R358	23 Circle, window	01/25/94		Purveyor
R359	23 Circle, closet	01/25/94		Purveyor
R360	1109B, closet	01/25/94		Purveyor
R361	1109B, back door	01/25/94		Purveyor
R362	1109B, front door	01/25/94		Purveyor
R363	1109B, window	01/25/94		Purveyor
R364	1109B, back fence	01/25/94		Purveyor

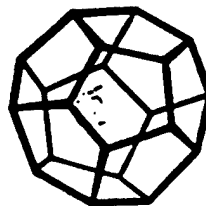
Dear Sir:

Attached is a copy of your sample analyses reports. Our laboratory provides many types of analysis, however, this specialized procedure is not one of them. Your samples were submitted to a carefully selected DOHS certified laboratory. Should you have any questions, please do not hesitate to call.

Sincerely,

Dawn M. Henton

Dawn M. Henton
Laboratory Director



NORTH COAS
LABORATORIES LTI

Date: 02/14/94

REPORT

Page 1 of 4

REPORT Henrici Water Laboratory
TO 1832 Butterfly Valley Rd.
Quincy, CA 95971

WORK ORDER 94-02-135

INVOICE # 60035611

Attn: Dawn Kenton

WORK ID: SIAD-PAINT

REPORT CERTIFIED BY

Judy Lhl
Laboratory Supervisor(s)

Michelle Dostal
QA Officer

Jesse G. Chaney, Jr.
Laboratory Director

SAMPLE IDENTIFICATION

Fraction Sample Description

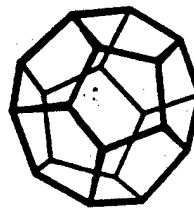
- 01 R344-1120B LASS. FRNT DOOR
- 02 R345-1120B LASS. BACK DOOR
- 03 R346-1120B LASS BACK FENCE
- 04 R347-1120B LASSEN SHELF
- 05 R348-1120B LASSEN WINDOW
- 06 R349-AMADEE COURT PLAYGRND
- 07 R350-AMADEE MERRY-GO-ROUND
- 08 R351-191B SCADDADDLE WAY
- 09 R352-191B SCADDADDLE FRNT
- 10 R353-191B SCADDADDLE BACK
- 11 R354-191B SCADDADDLE FENCE
- 12 R355-191B SCADDADDLE CLST
- 13 R356-23 BACK DOOR
- 14 R357-23 CIRCLE FRONT DOOR
- 15 R358-WINDOW 23 CIRCLE
- 16 R359-CLOS 23
- 17 R360- CLOS 1109B
- 18 R361-BACK DOOR 1109B
- 19 R362-FRONT DOOR 1109B
- 20 R363-1109B BEDROOM WINDOW
- 21 R364-1109B BACK YARD

Comments:

The lead result for sample 02A is an approximation. Roughly
half of the sample was lost during the digestion procedure.
The result reported is the lead content of the remaining
portion.

Notes and Definitions:

Limit = Detection Limit
ND = None Detected



Date: 02/14/94

REPORT

Page 2 of 4

Work Order: 94-02-135

Invoice #: 60035611

SAMPLE ID: R344-1120B LASS. FRNT DOOR FRAC.: 01A COLLECTED: 12/08/93 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	150	25	mg/kg	2.5		02/10/94	EPA7421

SAMPLE ID: R345-1120B LASS. BACK DOOR FRAC.: 02A COLLECTED: 12/08/93 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	3.4	2.0	mg/kg	4.0		02/11/94	EPA7421

SAMPLE ID: R346-1120B LASS BACK FENCE FRAC.: 03A COLLECTED: 12/08/93 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	120	10	mg/kg	1.0		02/10/94	EPA7421

SAMPLE ID: R347-1120B LASSEN SHELF FRAC.: 04A COLLECTED: 12/08/93 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	17	2.2	mg/kg	4.4		02/11/94	EPA7421

SAMPLE ID: R348-1120B LASSEN WINDOW FRAC.: 05A COLLECTED: 12/08/93 RECEIVED: 02/07/94

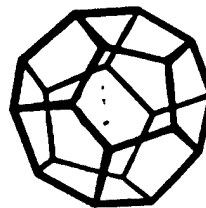
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	83	10	mg/kg	1.0		02/10/94	EPA7421

SAMPLE ID: R349-AMADEE COURT PLAYGRND FRAC.: 06A COLLECTED: 12/15/93 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	320	10	mg/kg	1.0		02/10/94	EPA7421

SAMPLE ID: R350-AMADEE MERRY-GO-ROUND FRAC.: 07A COLLECTED: 12/15/93 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	19000	10	mg/kg	1.0		02/10/94	EPA7421



Date: 02/14/94
Work Order: 94-02-135
Invoice #: 60035611

REPORT

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SAMPLE ID: R351-191B SCADDADDLE WAY FRAC.: 08A COLLECTED: 12/15/93 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	190	10	mg/kg	1.0		02/10/94	EPA7421

SAMPLE ID: R352-191B SCADDADDLE FRNT FRAC.: 09A COLLECTED: 12/15/93 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	9.9	2.0	mg/kg	4.0		02/11/94	EPA7421

SAMPLE ID: R353-191B SCADDADDLE BACK FRAC.: 10A COLLECTED: 12/15/93 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	17	2.0	mg/kg	4.0		02/11/94	EPA7421

SAMPLE ID: R354-191B SCADDADDLE FENCE FRAC.: 11A COLLECTED: 12/15/93 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	77	10	mg/kg	1.0		02/10/94	EPA7421

SAMPLE ID: R355-191B SCADDADDLE CLST FRAC.: 12A COLLECTED: 12/15/93 RECEIVED: 02/07/94

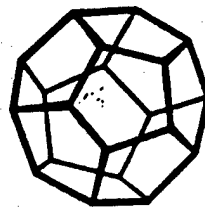
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	530	10	mg/kg	1.0		02/10/94	EPA7421

SAMPLE ID: R356-23 BACK DOOR FRAC.: 13A COLLECTED: 01/25/94 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	1900	10	mg/kg	1.0		02/10/94	EPA7421

SAMPLE ID: R357-23 CIRCLE FRONT DOOR FRAC.: 14A COLLECTED: 01/25/94 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	66000	10	mg/kg	1.0		02/10/94	EPA7421



Date: 02/14/94

REPORT

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Work Order: 94-02-135

Invoice #: 60035611

SAMPLE ID: R358-WINDOW 23 CIRCLE FRAC.: 15A COLLECTED: 01/25/94 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	1700	10	mg/kg	1.0		02/10/94	EPA7421

SAMPLE ID: R359-CLOS 23 FRAC.: 16A COLLECTED: 01/25/94 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	160	10	mg/kg	1.0		02/10/94	EPA7421

SAMPLE ID: R360- CLOS 1109B FRAC.: 17A COLLECTED: 01/25/94 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	9.6	2.7	mg/kg	5.3		02/11/94	EPA7421

SAMPLE ID: R361-BACK DOOR 1109B FRAC.: 18A COLLECTED: 01/25/94 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	84	10	mg/kg	1.0		02/10/94	EPA7421

SAMPLE ID: R362-FRONT DOOR 1109B FRAC.: 19A COLLECTED: 01/25/94 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	23	2.0	mg/kg	4.0		02/11/94	EPA7421

SAMPLE ID: R363-1109B BEDROOM WINDOW FRAC.: 20A COLLECTED: 01/25/94 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	110	10	mg/kg	1.0		02/10/94	EPA7421

SAMPLE ID: R364-1109B BACK YARD FRAC.: 21A COLLECTED: 01/25/94 RECEIVED: 02/07/94

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>DIL.FACTOR</u>	<u>EXTRACTED</u>	<u>RUN</u>	<u>METHOD</u>
Lead	130	10	mg/kg	1.0		02/10/94	EPA7421

**LABORATORY NUMBER:**

Copies of Report to: All SAC's & ASAC's

Purchase Order Number:

13

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

SHIPPED VIA: UPS Fed-Ex Bus Hand



707-822-4649 • FAX 707-822-6031

SECRET

Results & Invoice to: University of Waterloo Lab
Address: 1872 Courtney Valley Rd
Courtesy, CA 91771
Phone: 916 343 6 Sampled By: HLW
Copies of Report to: University of Waterloo Lab

☐ STD (2-3 Wk) ☐ Other:

PROJECT INFORMATION

Purchase Order Number:[illegible]

cool + interest

DATE/TIME

☐ Return ☐ Pickup

SHIPPED VIA: UPS Fed-Ex Bus Hand

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT



**NORTH COAST
LABORATORIES LTD.**

5680 West End Road • Arcata, California 95521
707-822-4649 • FAX 707-822-6631

Chain of Custody

LABORATORY NUMBER: 94-02-135

Attention: _____

Results & Invoice to: HEURICK 134702 LAB

Address: 13323 Beverly Valley VALLEY RD

Vallejo, CA 94591

Phone: 707-822-4649 Sampled By: HWK

Copies of Report to: HEURICK 134702 LAB

PROJECT INFORMATION

Project Number: _____

Project Name: SIAD - PAINT

Purchase Order Number: _____

REPORTING REQUIREMENTS: State Forms ☐

Preliminary: FAX ☐ Verbal ☐ By: 1/1

Final Report: FAX ☐ Verbal ☐ By: 1/1

TAT: ☐ 24-48 Hr (100% SUR) ☐ 5D (50% SUR)

☐ STD (2-3 Wk) ☐ Other: _____

PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

SPECIAL INSTRUCTIONS:

list for Lead
in final samples

SAMPLE DISPOSAL

☐ NCL Disposal of Non-Contaminated

☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/NVA ☒

SHIPPED VIA: ☐ UPS ☐ Fed-Ex ☐ Bus ☒ Hand

ANALYSIS REQUEST

LAB ID	SAMPLE ID	DATE	TIME	SOIL/WAT/ OTHER
10	100-111-111	1/1/94	1:00	Soil
11	100-111-111	1/1/94	1:00	Soil
12	100-111-111	1/1/94	1:00	Soil
13	100-111-111	1/1/94	1:00	Soil
14	100-111-111	1/1/94	1:00	Soil
15	100-111-111	1/1/94	1:00	Soil
16	100-111-111	1/1/94	1:00	Soil
17	100-111-111	1/1/94	1:00	Soil
18	100-111-111	1/1/94	1:00	Soil
19	100-111-111	1/1/94	1:00	Soil
20	100-111-111	1/1/94	1:00	Soil
21	100-111-111	1/1/94	1:00	Soil
22	100-111-111	1/1/94	1:00	Soil
23	100-111-111	1/1/94	1:00	Soil
24	100-111-111	1/1/94	1:00	Soil
25	100-111-111	1/1/94	1:00	Soil
26	100-111-111	1/1/94	1:00	Soil
27	100-111-111	1/1/94	1:00	Soil
28	100-111-111	1/1/94	1:00	Soil
29	100-111-111	1/1/94	1:00	Soil
30	100-111-111	1/1/94	1:00	Soil

NO. OF CONTAINERS

REMARKS/SAMPLE CONDITION

Lead + paint

RELINQUISHED BY (Sign & Print)

DATE/TIME

RECEIVED BY (Sign)

DATE/TIME

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT



LABORATORY NUMBER: 97-02-35

REPORTING REQUIREMENTS: State Forms ☐

Preliminary: FAX ☐ Verbal ☐ By: / /Final Report: FAX ☐ Verbal ☐ By: / /

TAT: ☐ 24-48 Hr (100% SUR) ☐ 5D (50% SUR)

☐ STD (2-3 Wk) ☐ Other:

PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

ANALYSIS REQUEST

Project Number:

Project Name: 1AD-1A15

Purchase Order Number:

[illegible][illegible]

RECEIVED BY (Sign)

DATE/TIME

SAMPLE DISPOSAL

☐ **NCL Disposal of Non-Contaminated**

Pickup

CHAIN OF CUSTODY SEALS Y/N/NA

SHIPPED VIA: UPS Fed-Ex Bus Hand

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT



5680 West End Road • Arcata, California 95521
707-822-4649 • FAX 707-822-6631

LABORATORY NUMBER: 04 02 1345

Attention:

Results & Invoice to: LEADER, 11A7EK LAR

Address: 107 E. Tenth St., Vicksburg, Miss.

1971

phone: 11-21-13-66
Sampled By: *Harvard*

Copies of Report to: *Director, FBI* *LA 3*

PROJECT INFORMATION

Project Number:

Project Name:

Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	SOIL/WAT/ OTHER
19	11-11-11	11-11		
20	11-11-11	11-11		
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100	11-11-11	11-11		

ANALYSIS REQUEST

[illegible]

SPECIAL INSTRUCTIONS:

Try for a try

11. 10. 1900

May 2001

REMARKS/SAMPLE CONDITION

social + political

SAMPLE DISPOSAL

☐ **NCL Disposal of Non-Contaminated**☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS YANNA

SHIPPED VIA: UPS Fed-Ex Bus Hand

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

APPENDIX D

**RESPONSES TO AGENCY COMMENTS ON DRAFT EBS AND CERFA REPORT
SIERRA ARMY DEPOT**

APPENDIX D

U.S. ENVIRONMENTAL PROTECTION AGENCY REVIEW COMMENTS ON THE DRAFT ENVIRONMENTAL BASELINE SURVEY, SIERRA ARMY DEPOT HERLONG AND HONEYLAKE REUSE PARCELS

SPECIFIC COMMENTS

Comment No. 1, page 12, Section 2.7 Proposed Reuse

The statement is made that "[t]he conceptual reuse of the Herlong Parcel (Weis, 1995) is as follows." The background documentation cited -- "Weis, 1995" -- appears to be only an interoffice facsimile memorandum. What is the source of the information which allows the Army to predict the future reuse? Please describe the status of any official reuse plan under development.

Response

The Local Reuse Authority (LRA) is currently preparing a reuse plan; the contents of this plan are not available to the Army at this time. However, much discussion has occurred between the Army and the LRA, which is the source of the statement in the draft EBS report. At the time of issue of the Draft Final EBS report (October 1996), the Army will include the status of the official reuse plan as available.

Comment No. 2, page 25, Section 4.1.2.1 Herlong Parcel

The first paragraph of this section states that none of the buildings owned by the State of California or CUC were included in the ACM survey. Is the property upon which the buildings are located owned by the State of California or the Department of the Army? If the property is owned by the Army and scheduled for transfer then an assessment of the environmental condition of the property is required. Ownership of the buildings does not affect this requirement.

Response

Comment noted. The property upon which the buildings are located is owned by the Army; the Army is in the process of obtaining letters from the State of California documenting the absence of ACM and lead-based paint in the buildings.

Comment No. 3, page 27, Section 4.1.2.1 Herlong Parcel

- a. *This section discusses that the soil in the vicinity of former building [demolished prior to 1988], excluding the former Title 8 Housing Area and Building T-1019, may be affected with ACM. Based upon this, the Army should provide notification in accordance with CERCLA Section 120(h)(3)(A), that a CERCLA release may have occurred. In addition, the Army should discuss how it will satisfy CERCLA Section 120 (h) (3) (B) (i), which requires that all remedial actions necessary to protect human health and the environment with respect to any such substance remaining on the property have been taken before the date of transfer.*

The locations of the former buildings and potential boundaries of ACM in soils should also be identified.

Response

As discussed at the Remedial Project Managers meeting on June 13, 1996, the effort of preparing a quality location map for the former buildings would be high because available information is crude

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and copies are of low quality. However, copies of the available information will be included in the draft final version of the report. Due to the nature of demolition of the buildings, specific locations of former buildings are not necessary for site characterization. If soil were impacted by ACM, it would not be localized, ACM-impacted soil would be across the former structures area. The Army shall perform sampling of this area in August 1996 to identify whether ACM-impacted soil is present. The results of this sampling will determine whether and how CERCLA Section 120 (h) applies to this area; this will be addressed in the draft final version of the EBS report.

Comment No. 4, page 31, Section 4.2.2.1 Herlong Parcel

The Army presents a discussion of the analytical results for lead which were performed on various paint samples on the buildings. The Army presents no discussion of possible lead based paint in the soil which appears to have led the Army to characterize the housing areas as Category 7. The Army refers to various sampling results in relation to the "EPA threshold of 5,000 mg/kg lead for abatement of LBP in residential structures". How do the Army's analytical results inform the Army's conclusions about LBP in the Soil? How do these results influence the categorization of property?

Response

As discussed at the Remedial Project Managers meeting on June 13, 1996, the Army shall conduct soil sampling to identify whether lead-based paint has impacted soil and to determine the appropriate categorization of the property. The analytical results of lead performed on various paint samples in buildings were provided as information regarding the buildings.

Comment No. 5, page 31, Section 4.2.2.1 Herlong Parcel

The third paragraph refers to demolished structures on the Herlong parcel. What are the Army's conclusions about the presence of lead-based paint in the demolition area?

Response

Soil sampling will be conducted by the Army in August 1996 to determine the potential impact to soil by lead-based paint.

Comment No. 6, page 35, Section 4.5.1 Summary of [Ordnance and Explosives] Programs

The Army states that the main objective of the ordnance and explosives assessment program is to evaluate and address physical hazards due to the presence of OE. Please note that the potential release of hazardous substances to the environment as a result of expended or decayed components of ordnance are also of concern.

Response

Comment noted.

Comment No. 7, page 37, Section 4.6.1 Summary of [PCB] Programs

It is EPA's position that the presence of PCBs in transformers which have been in continual use and which do not leak would not in and of themselves disqualify property from being eligible for Category 1 designation. It appears from the [CERFA?] maps that two or more areas may have been designated as Category 2 property based solely on the presence of PCB transformers. If these transformers do not leak and the transformers have been and continue to be in use, the Base Cleanup Team has the option to recategorize the property as CERFA-eligible.

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Response

Comment noted; the maps shall be revised accordingly.

Comment No. 8. page 40, Section 4.7.2.1 Herlong Parcel

SIAD Owned USTs and ASTs and School-Owned USTs and ASTs: The EBS states that no information or closure records regarding formerly used USTs is available. This lack of information creates a data gap. Without written records, physical observation and/or sampling, a determination on the environmental condition of the property in the vicinity of the USTs cannot be made. The Army should develop a plan to further assess potential releases from these tanks in order to provide the regulatory agencies with sufficient data to make a determination on the environmental condition of the property.

Response

The Army has developed, and shall implement, a sampling plan to obtain the data necessary to make a determination on the environmental condition of the property at the tank sites.

APPENDIX D

DEPARTMENT OF TOXIC SUBSTANCES CONTROL COMMENTS TO THE DRAFT ENVIRONMENTAL BASELINE SURVEY (EBS)/ COMMUNITY ENVIRONMENTAL RESPONSE FACILITATION ACT (CERFA) REPORT, DATED APRIL 1996, FOR HERLONG AND HONEY LAKE REUSE PARCELS, SIERRA ARMY DEPOT, LASSEN COUNTY, CALIFORNIA

GENERAL COMMENTS

Comment No. 1

It appears that there are significant data gaps regarding the status of tanks owned by both the Army and the State. Several tanks have been abandoned in place or removed without closure documentation to reflect compliance with applicable federal and state underground storage tank (UST) regulations. The Army needs to identify a plan to further assess the likelihood of releases from these tanks.

Response

The Army will investigate the status of the Army-owned tanks and will provide closure documentation, as available. Investigations may include site characterization activities or review of other documents providing information on the likelihood of a release from the Army's tanks. The Army will contact the State regarding compliance information about the State's tanks; if data are unavailable, the Army will conduct sampling to obtain site characterization data. Site characterization activities are scheduled to be conducted during August 1996.

Comment No. 2

The document uses the terms Unexploded ordnance and Ordnance and Explosives interchangeably. Please clarify the use of the different terms or use one term consistently throughout.

Response

Unexploded ordnance (UXO) is a subset of ordnance and explosives (OE), therefore use of the term UXO has a specific meaning. The Army will review the EBS closely relative to use of OE and UXO, will provide a brief discussion and definition of the terms, and attempt to clarify the text to eliminate confusion.

SPECIFIC COMMENTS

Comment No. 1, page vii, Executive Summary, paragraph 1

The text states that property was classified as Base Realignment and Closure (BRAC) Area Type 2 because of the presence of electrical transformers which contain Polychlorinated Biphenyl (PCB) oils. Please note that the mere presence of PCB transformers does not necessarily disqualify a parcel from being considered "uncontaminated". Parcels which contain PCB-filled transformers which are operable and in normal use with no evidence of release can be considered "uncontaminated" pursuant to CERFA.

Response

The Army will reclassify property previously classified as Category 2, on the basis of the presence of PCB transformers as Category 1, Uncontaminated. This change will be reflected in the draft final version of the report.

Comment No. 2, page vii, Executive Summary

Since this is the first time property categories are discussed in the document, please briefly define them.

Response

As requested, the Army will modify the Executive Summary to provide definitions of the property categories.

Comment No. 3, page vii, Executive Summary, paragraph 1

The text should include a discussion regarding the requirement under Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 120(h) (4) to seek the State's concurrence with the identification of "uncontaminated" property that is part of a Non-National Priority List site. This is done before property is offered for transfer as uncontaminated. Please note that the Army should request the State to concur on the property identified as BRAC Area Type 1. The request letter should be addressed to Mr. David Wang, Chief Program Executive, Department of Toxic Substances Control, Office of Military Facilities.

Response

The Army will revise the text to include discussion regarding the requirement under CERCLA Section 102(h)4 requesting the State's concurrence on Category 1 property and will issue the appropriate letter to Mr. Wang, Chief Program Executive, DTSC.

Comment No. 4, page 18, Section 3.1, Records Search, paragraph 1

The text states that there were three or four minor spills (three to five gallons each) which occurred between 1987 and 1994 on the Herlong Parcel. Please provide specific details regarding these spills and how they were remediated.

Response

As requested, the Army will provide available information about these earlier, minor spills in the draft final version of the report.

Comment No. 5, page 25, Section 4.1.1, Summary of Program

The text states that the asbestos survey was conducted in 1988. Since the survey was accomplished more than five years ago, does the Army expect to perform another asbestos survey prior to transfer or lease?

Response

The Army does not anticipate conducting another asbestos survey.

Comment No. 6, page 26, Section 4.1.2.1, Herlong Parcel, paragraph 2

Information about the condition of asbestos in structures should be provided to future users in addition to whether the asbestos is friable or non-friable.

Response

The Army will disclose available information on the condition of asbestos in structures to future reusers in the deed.

Comment No. 7, page 27, Section 4.1.2.1, Herlong Parcel, paragraph 2

The text states there is no documentation that asbestos was removed from several buildings demolished prior to 1988, therefore, the soil may have been impacted by asbestos containing material (ACM). Locations of former buildings should be identified on a map.

Response

The effort of preparing a quality location map for these buildings would be high because available information is crude and copies are of low quality; however copies of the available information will be included in the draft final version of this report. Due to the nature of demolition of the buildings, specific locations of former buildings are not necessary for site characterization. If soil were impacted by ACM, it would not be localized; ACM-impacted soil would be across the former structures area. The Army shall perform sampling of this area in August 1996 to identify whether ACM-impacted soil is present.

Comment No. 8, page 27, Section 4.2, Lead-based Paint Program

The text should discuss the Army's policy to evaluate soils surrounding structures containing Lead Based Paint (LBP). We understand that the Army will evaluate soils surrounding pre-1960 structures destined for residential uses.

Response

The Army will perform soil sampling for lead in the area of the pre-1960 structures, which have been demolished. This sampling will be conducted in concurrence with the investigation to determine whether soils have been impacted by ACM. As noted in the Version 1 BRAC Cleanup Plan, sampling for lead will be performed in a manner identical to remedial investigations conducted under the IRP.

Comment No. 9, page 35, Section 4.5.2.1, Herlong Parcel

The text should clarify what training activities took place using Ordnance and Explosives at the Former Title 8 Housing area. Specify which activities took place inside versus outside structures.

Response

The discussion regarding OE training activities will be expanded to provide additional information; this will be included in the draft final version of the report.

Comment No. 10, page 36, Section 4.5.2.2, Honey Lake Parcel

The text should state that an investigation is currently being conducted to verify that the lake has been used as a bombing range.

Response

Additional investigations are currently being performed on the Honey Lake parcel; it is the Army's intent to present the results of these studies in the next version of this report. Preliminary data indicate that the lake was not used as a bombing range and that the OE-impacted area is limited to the

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Installation Restoration Program (IRP) site located on the eastern edge of the parcel. As indicated during the Remedial Project Managers meeting on June 13, 1996, there is a strong likelihood that the IRP portion of Honey Lake will be removed from the BRAC parcel.

Comment No. 11, page 39, Section 4.7.1. Program Status and EBS Results

The text states that tanks containing waste oil are located on the Herlong Parcel. Please clarify that this was storage less than 90 days otherwise a storage permit is required.

Response

The Army will verify that storage will be for less than 90 days.

Comment No. 12, page 39, Section 4.7.2. Program Status and EBS Results

There appears to be little or no documentation concerning the status of former and existing USTs and Above Ground Storage Tanks (ASTs) owned by the Herlong School District. As the property owner, the Army is obligated to evaluate the tanks and investigate the likelihood of past or future releases of any contaminants from the tanks.

Response

As noted in General Comment 1, if the Army cannot locate data verifying that releases have not occurred from these tanks, the Army will perform sampling at these tank locations during August 1996.

Comment No. 13, pages 40 and 41, Section 4.7.2.1., SIAD-Owned USTs and ASTs

The text states that six former USTs were removed between 1991 and 1994 and that these were used to fuel diesel-fired boilers associated with former and current buildings. Are there closure or removal records? The Army appears to rely on interviews with current and former employees to confirm tank removals. Closure records or other tank assessments are necessary to ensure no releases of contaminants have occurred.

Response

As noted previously, if the Army is unable to obtain removal records, the Army will conduct site investigations in August 1996. The Army intends to obtain the necessary information to obtain tank closure from Lassen County Health Department prior to release or lease of property.

Comment No. 14, page 41, Section 4.7.2.1, SIAD-Owned USTs and ASTs

The text states that two of the three ASTs contain diesel storage, however, it does not address the third AST which is listed in Table 10 as contents 'unknown'. The text further states that this tank was taken out of service in 1995 and is currently empty. What is the intention for the tank now that it is empty? Please clarify whether this tank is army-owned or state-owned since Table 10 shows the tank located at the primary school but this discussion is under the heading Sierra Army Depot (SIAD)-owned USTs and ASTs. Also, the size can be estimated based on a visual inspection.

Response

Comment noted; the Army will research this issue and present the result in the draft final version of the EBS report.

Comment No. 15, page 42, Section 4.7.2.1., School-owned USTs and ASTs

The text states that there are no closure records available for the seven former or existing tanks owned by the Herlong School District (four are removed and three remain in place backfilled with concrete). The text states that the two ASTs contain diesel and gasoline. What types of material did the former tanks contain?

Response

Comment noted; the Army will research this issue and present the result in the draft final version of the EBS report.

Comment No. 16, page 43, Section 4.8, Solid and Hazardous Waste Management Program

This section should focus on the solid and hazardous waste management activities that occurred on the reuse parcels. The text states that hazardous materials (e.g. lead dust, paint, batteries, solvents, pesticides, etc.) were stored at satellite waste sites, storage buildings, and covered concrete containment pads. Please clarify which of these activities took place on the reuse parcels. It is clear from reading previous EBS sections that tanks were used to store hazardous materials, what other types of activities took place? The text references Table 1 of the SIAD Spill Prevention, Control and Countermeasure Plan (SPCC) for information on types of hazardous materials and storage locations. Quantities should also be included. Areas where storage of hazardous materials or waste occurred may need further evaluation to determine the likelihood of past releases. Please include the Table referenced as part of the SPCC in the EBS/CERFA, Report.

Response

Comment noted; the Army will research the issues and present the results in the draft final version of the EBS report. The table referenced from the SIAD Spill Prevention, Control and Countermeasure Plan (SPCC) will be included in the draft final EBS report.

Comment No. 17, page 44, Section 4.9, Environmental Restoration Program

The text states that CERFA involves the evaluation of the environmental condition of real property, including categorizing property according to the seven CERFA categories and the identification of uncontaminated real property. Please note, CERFA only requires identification of uncontaminated property. The Department of Defense (DOD) requires the use of the BRAC Area Types 1 through 7 when classifying property at a closing base. When property is identified uncontaminated pursuant to CERFA, it is given the BRAC Area Type 1 or Property Category 1 designation.

Response

Comment noted; text to be modified to be clear on this issue.

Comment No. 18, page 51, Honey Lake Parcel, paragraph 5

The text states that a ordnance survey was conducted by UXB International, Inc., of Chantilly, Virginia to determine the extent of Unexploded Ordnance and ordnance debris in the eastern portion of Honey Lake and that the area was cleared of all ferrous and non-ferrous metal to a depth of eight inches. Was any ordnance found and cleared? Please clarify what the final intention is for this area (i.e., future work planned).

Response

As noted previously, investigations are being conducted and the results are intended to be included in the draft final version of the EBS report. The intent of the studies is to provide documentation necessary to delineate the boundary of where OE may be present in Honey Lake. The U.S. Army Corps of Engineers, Huntsville District study is designed to verify that Honey Lake was not used as a bombing range (see Specific Comment 10), and the Montgomery IRP studies (past and upcoming September 1996 investigation) are designed to delineate the maximum boundary of the IPR site. UXO was identified and cleared in the IRP portion of the Honey Lake parcel.

Comment No. 19, page 54, Section 4.10, Potential Impacts from Adjoining Properties, Building 1003 bullet

The text states that soil was contaminated from a waste oil spill. The 1995 Focused Feasibility Study recommended in situ remediation. The text describing the selected remedy needs to be modified in accordance with the nine sites Record of Decision.

Response

The text will be modified in accordance with the Nine Sites Record of Decision.

Comment No. 20, page 59, Section 5.1 Findings and Plate 2

The text states that soils in areas of former structures may be affected by asbestos and LBP. The text refers to Plate 2 to identify areas where former structures were located. The areas identified on the map are too broad and general. It would be helpful if the location of former structures were more narrowly defined.

Response

Comment noted; please refer to response to Specific Comment 7.

Comment No. 21, page 64, Section 6.2, Herlong Parcel

The mere presence of PCB transformers do not disqualify property from being considered uncontaminated under CERCLA Section 120(h) (4). Parcels with active (in-service) transformers which are not leaking can be considered uncontaminated.

Response

Comment noted; please refer to response to Specific Comment 1.

Comment No. 22, page 65, Section 6.2, CERFA Evaluation for the SIAD Reuse Parcels, paragraph 1

The discussion regarding DoD policy for abatement of Asbestos and LBP should include certain points gleaned from the DoD policy, they are: LBP abatement only required for residential use of structures and DoD can negotiate with transferees to do necessary abatement of LBP and asbestos.

Response

Comment noted; text to be revised accordingly.

Comment No. 23, page 1 of 1, Table 9

The summary for this table includes tanks which have been removed and are therefore not considered "active". Suggest you rename the table.

Response

Comment noted; table to be revised.

Comment No. 24, page 65, paragraph 3

The Army may want to further define the areas suspected of containing ACM and LBP based on the actual location of former structures.

Response

Comment noted; please refer to response to Specific Comment 7.

Closing Comment

Finally, we recommend early public participation in the EBS/CERFA process. The public should be notified that conclusions about the environmental condition of property are being drafted and given an opportunity for document review.

Response

Comment noted; Sierra Army Depot has planned to keep the public informed on a quarterly basis through the Technical Review Committee meetings which are being coordinated with the DTSC; additionally, the public has the opportunity to comment when the document goes through the formal public review process.

APPENDIX D

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION COMMENTS TO DRAFT ENVIRONMENTAL BASELINE SURVEY (EBS) COMMUNITY ENVIRONMENTAL RESPONSE FACILITATION ACT (CERCLA) REPORT, HERLONG AND HONEY LAKE REUSE PARCELS, SIERRA ARMY DEPOT APRIL 1996

GENERAL COMMENTS

Comment No. 1

The report states on Page 60 and elsewhere that "No releases of petroleum hydrocarbons have been reported for any of the existing USTs and ASTs on the Herlong Parcel. Details regarding closure data of former USTs managed by SIAD and closure data of former USTs managed by the State of California at the schools on the Herlong Parcel were not available." The tanks within the Herlong Parcel, as listed in the report, include six former USTs, five existing USTs (to be removed in 1996), and three existing ASTs. The State of California School System owns (owned) four former USTs, three existing USTs (backfilled with concrete) and two existing ASTs. Without any tank closure records, it is impossible to determine if the tanks were closed in accordance with California UST regulations, or if any leakage occurred at the tank sites. California and Federal UST regulations require the taking of one or more closure samples beneath each tank.

Response

The Army is scheduled to conduct sampling at these tank locations in August 1996 if tank closure records cannot be located prior to that time. The draft final version of the EBS report will include the results of the sampling program.

Comment No. 2

A fuel leak at the swimming pool is being investigated under the Abandoned Landfill and Southern Sites Area investigation/Feasibility Study. The investigation of the swimming pool fuel leak was not discussed in the report.

Response

Comment noted; text to be revised.

APPENDIX E

RESPONSES TO AGENCY COMMENTS ON DRAFT FINAL EBS AND CERFA REPORT SIERRA ARMY DEPOT

APPENDIX E

**DEPARTMENT OF TOXIC SUBSTANCES CONTROL
OFFICE OF MILITARY FACILITIES
COMMENTS ON THE
DRAFT FINAL ENVIRONMENTAL BASELINE SURVEY (EBS) AND
COMPREHENSIVE ENVIRONMENTAL RESPONSE FACILITATION ACT (CERFA)
DATED NOVEMBER 1996
SIERRA DEPOT (SIAD), HERLONG CALIFORNIA**

GENERAL COMMENTS

Comment No. 1, Pesticides

Please provide any information available regarding use and application of pesticides at SIAD. This information should include types of pesticides used, quantities, frequency rates, etc. Ideally, the information collected should be included in EBS or FOST which is provided to future users.

Response

As reported by SIAD Pest Management Coordinator Arthur J. Gomez, pesticide use at SIAD between the years 1989 and 1996 included the following substances and quantities:

Pesticide Name	Quantity Used (pounds)
Bendiocarb	0.60
Chlorpyrifos	1.00
Pyrethrum	0.01
Boric acid	0.50
Hydramethlynon	0.0006
Carbaryl	0.01

Mr. Gomez indicated that these reflect the types and quantities of pesticides used at SIAD prior to his assignment as the Pest Management Coordinator at the start of Fiscal Year (FY) 1989. He noted that the use of pesticides at SIAD has been limited in nature and areal extent (Main Post/Herlong Area). Of additional note is the fact that the Pest Management Area is located within the Main Post in an area, which is included in the Installation Restoration Program (IRP) Abandoned Landfill and Southern Sites Area, which is currently being investigated under the Army's IRP. Significant release of pesticides would be most likely identified under this study.

This and a description of SIAD's Pesticide Management Program have been added as Section 4.12 to the Final EBS report.

Comment No. 2, Ordnance and Explosives (OE)

The Army's delineation of property affected by potential OE is preliminary for the Airfield and Honey Lake East Shoreline Parcels. Army reports regarding OE investigations should be submitted for review before CERFA concurrence is requested for those areas adjacent to potential OE sites.

Response

The Army has recently provided the Draft Archives Search Report (ASR) prepared by the Rock Island Corps of Engineers in October 1996. As noted during previous meetings and in the Draft Final EBS report, areas identified as potentially containing ordnance and explosives (OE) are conservative boundaries, meaning that they are the maximum boundaries of property potentially containing OE. As reported at the January 23, 1997, BRAC Cleanup Team meeting, Montgomery Watson has conducted further evaluation of the IPR site in Honey Lake (Honey Lake Demolition Range); results of this study will be provided to the regulatory agencies under separate cover. Additionally, Mr. Robert Weis, SIAD, reported that the Army will conduct future studies to further delineate and reduce the acreage of land suspected to contain OE on the East Shoreline and Airstrip Parcels. At the current time, the conservative Category 7 boundaries in the Honey Lake, East Shoreline, and Airstrip Parcels will remain unchanged in the Final EBS report. As further information is obtained, it will be provided to the regulatory agencies either in a Finding of Suitability to Transfer (FOST) or EBS addendum.

Comment No. 3

Please provide rationale in the document for the delineations of areas of concern (e.g., tank release sites, etc.).

Response

Delineations of areas of concern identified on the map by the are approximate boundaries indicating the maximum extent of areas of concern. As additional data are obtained to reduce these boundaries, the data will be provided to the regulatory agencies either in a FOST or EBS addendum.

No change to the report is being made in response to this comment.

Comment No. 4, Maps

It does not appear that a CERFA Map for the Herlong Parcel has been included in our copy of the EBS/CERFA Report.

Response

Comment noted. Plate 2 was issued under a separate cover from the draft final report on the same date; our records indicate all recipients of the report were issued Plate 2.

SPECIFIC COMMENTS

Comment No. 1, page vi, Executive Summary, paragraph 4

The text states that some of the parcels are categorized as DOD category 3 because there was a release of hydrocarbons. The document should also discuss the parcels which have a release of hydrocarbons above local health agency cleanup levels. These parcels may require further evaluation to determine whether response actions are necessary. Under the classification scheme used for this EBS, these parcels may be classified as DOD Category 7 until evaluations are completed.

Response

Agreed. Plates A-1, B-1, C-1, and 7 have been revised accordingly. In response to this comment, Plates A-1, B-1, and C-1 now show the tank area in the Airstrip Parcel to be classified as Category 7. For Plate 7, UST-5 has been reclassified as CERFA Category 3 while ASTs A, B, and 1203 and UST-68 remain classified as CERFA Category 7.

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Comment No. 2, Section 4.1.2.1, Herlong Parcel, paragraph 2

The text states "On the basis of their construction date (1987), nonfriable ACM is presumed present and friable ACM is presumed not present in buildings 1121-1160." Unless the structure is surveyed, how does the Army reach the conclusion that the ACM present is non-friable based on construction information? Please clarify.

Response

The last sentence of the thirt paragraph of Section 4.1.2.1 has been revised to read as follows:

Friable ACM is unlikely to be present in Buildings 1121 through 1160 based upon the 1987 construction date of the buildings. However, non- friable ACM is assumed to be present in these buildings.

It is agreed that the construction date does not confirm the absence of friable ACM. However, it is likely that friable ACM is not present in the 1987-constructed buildings. The Army will either disclose the potential presence of ACM or conduct a survey confirming or denying its presence prior to lease and/or transfer.

Comment No. 3, page 16, Section 4.1.2.1, Herlong Parcel

Please provide the Army's rationale and conclusion regarding the potential for the release of lead-based paint to soils surrounding State of California structures and the Citizens Utility Company (CUC) structure. Even though the Army does not own the structures, the Army is obligated to evaluate the potential for any environmental impacts to its property.

Response

The State of California- and CUC-owned buildings were constructed and have been maintained by those agencies, respectively. State of California School District representatives report that they are in full compliance with State-mandated LBP (and other) programs for schools. SIAD environmental staff report that the CUC has aggressive PCB management and removal programs, although information regarding CUC's LBP were not available. Both CUC and State of California buildings have been well maintained during their tenancy on SIAD per SIAD environmental staff and current reuse information, the Army property upon which these buildings are constructed will be transferred to these agencies, respectively.

Comment No. 4, page 16, Section 4.1.2.1, Herlong Parcel

The text states that no samples were found to contain asbestos above laboratory detection limits. For clarity, please specify what "laboratory detection limits" signifies.

Response

The Weiss Associates reported laboratory detection limits for asbestos to be one percent (1%). This has been added to the text of the report.

Comment No. 5, page 22, Section 4.5.2.2, Honey Lake Parcel

Please specify what reports, in addition to the U.S. Army Corps of Engineers, Rock Island District - Ordnance and Explosives Archives Search Report, are expected to be developed to complete the evaluation of OE impacts at SIAD.

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Response

As noted earlier, a report summarizing the areal geophysical survey conducted at the Honey Lake Demolition Area will be submitted under the requirements of the SIAD FFSRA in the summer of 1997. Additional studies are in the planning stages and information regarding these studies will be provided to the regulatory agencies as it is generated. As noted during the January 23, 1997, BCT meeting, "ground truthing" for OE in the Airstrip and East Shoreline Parcels has been funded and is likely to be implemented during FY 1997.

No revision to the report has been made in response to this comment.

Comment No. 6, page 24, SIAD-owned USTs and ASTs

Please describe any further response actions necessary for areas affected by petroleum releases. For example, the text states that there are areas with TPH concentrations above the County Department of Health clean-up action levels. Apparently, these areas need further evaluation to determine appropriate response actions. In addition, maps should identify what areas require further evaluation (i.e. DOD Category 7, etc.).

Response

As noted in General Comment No. 4, maps to be submitted in the Final EBS will reflect areas requiring further evaluation as CERFA Category 7. Details of further response actions have not been developed at this time; they will be forwarded to the BCT in the future, as appropriate.

Comment No. 7, pages 26 through 27, School-owned USTs and ASTs

The text states that sample results from AST-B indicated concentrations of up to 820 ppm TPH-diesel. What further actions are necessary? Also, please define "laboratory limits". In addition, maps should identify what areas require further evaluation (i.e. DOD Category 7).

Response

As noted in General Comment No. 4, maps to be submitted in the Final EBS will reflect areas requiring further evaluation as CERFA Category 7. Details of further response actions have not been developed at this time and are subject to negotiations with the school district; they will be forwarded to the BCT in the future, as appropriate. Laboratory limits for TPH-diesel reported in the Weiss Associates report is 1.0 to 1.2 ppm.

Comment No. 8, page 26, Section 4.8, Solid and Hazardous Waste Management Program

The text states that three or four minor spills (3 to 5 gallons each) occurred on the Herlong or Honey Lake Parcels. Please discuss, if the information is available, what type of materials were spilled, where they were spilled and how they were remediated.

Response

Additional research was conducted in response to this comment. The text in Section 4.8 has been revised to note the following:

No spills on the Honey Lake Parcel were identified. On the Herlong Parcel various minor spills were reported as occurring between 1987 and 1994 (Getty, 1995). These spills included 1 gallon of battery acid, 1 gallon of ink thinner, 2 gallons of Blanket roller wash, and at least four 1-gallon spills of latex paint; SIAD records that each of these spills were remedied within 24 hours of being reported.

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Comment No. 9, page B-6, Section B.4, Results of EBS for HLES Reuse Parcel.

Please specify what regulatory agencies signed the No Action ROD for Toxic Storage Building 578.

Response

In accordance with the FFSRA, the State of California (DTSC and RWQCB representatives) and Army representatives are signatories to the No Action ROD for the Toxic Storage Building 578. This information has been added to the text of the report.

Comment No. 10, page A-1, Section A.1 (Airfield Parcel)

Please identify the location of buildings, current and former storage tanks, and spills, etc. on the maps. The spill near Building 627 warrants more evaluation; therefore, this area should be reclassified to BRAC Area Type 7. In addition, more information is necessary for the former UST. The text states that the Army sampled to determine whether there was a release of petroleum substances; however, the data are not available. This area should be evaluated further. If no tank closure results are available, we recommend a couple of soil borings be taken to determine whether there have been any releases.

Response

The locations of current site features may be found on Plate A-2. Due to the scale of Plate A-1, these features cannot be added. The greater area of the spill near Building 627 has been reclassified at BRAC Area 7. A soil sample was collected in the area on January 28, 1997; a concentration of 18,000 mg/kg TPH was reported. Additional studies at this site are being planned. The results of these studies will be provided to Cal-EPA and the Lassen County Health Department upon completion.

Comment No. 11, page A-1, Section A.1 (Airfield Parcel)

Was there any aircraft washing that occurred on the parcel (i.e. use of solvents, etc.). If so, what is the Army's conclusion with regard to potential impacts to surrounding soils?

Response

Aircraft were not washed on the Airfield Parcel at any time. Aircraft were only onsite for loading and unloading. Therefore, there is no potential impact to surrounding soils due to aircraft washing. Additional language will be added to Addendum A.

Comment No. 12, page C-2, Section C-2, Parcel Description and Oral History for Southwest Corner Parcel

The text states that "A monitoring well that is associated with the existing landfill, located approximately 0.5 mile to the north of the parcel boundary is also present on the parcel." Please identify the location of the well on the map. Deed restrictions regarding access and use of the well may be necessary at time of transfer. In addition, please identify on the maps, the location and size of the active rifle range. Former uses should also be discussed for this parcel.

Response

The monitoring well locations and identification have been added to the plate(s). The Army acknowledges that deed restrictions regarding access and use of these wells may be required as part of transfer. The active rifle

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range, which was drawn on the maps but not labeled, has now been labeled. Additional language referencing this land as undeveloped (no former uses) has been added to the text.

Comment No. 13, page C-2, Section C.2, Results of EBS for Southwest Corner Parcel

It appears that the blocked area identified within the Southwest Corner parcel boundaries (i.e., existing fire fighting facility) should be classified as DOD Category 6 since response actions have been implemented and are ongoing.

Response

The block identified as the Existing Fire-fighting Facility has been classified as CERFA Category 5, because the remedial action has been implemented but not completed.

**LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD
COMMENTS ON THE
DRAFT FINAL ENVIRONMENTAL BASELINE SURVEY (EBS) AND
COMMUNITY ENVIRONMENTAL RESPONSE FACILITATION ACT (CERFA) REPORT
DATED NOVEMBER 1996
HERLONG AND HONEY LAKE REUSE PARCELS, SIAD**

GENERAL COMMENTS

Comment No. 1

Individual drawings of each site should be included. The site drawings should include the approximate tank outline, boring locations and sample results. The draft final report lists the locations of the borings, however, the locations of the boring relative to the former tank locations are not given. This is especially important as the property is being considered for transfer.

Response

The Weiss Associates report has been revised to address this comment. The revised report has been provided to the regulatory agencies under separate cover.

Comment No 2

17 UST/AST sites are listed in Table 1 of the Weiss Associates' report, however, Section 1 (Introduction and Project Description) of the same report states that eighteen UST locations were sampled. The discrepancy should be corrected in the final report.

Response

The Weiss Associates report has been revised to address this comment. The revised report has been provided to the regulatory agencies under separate cover.

Comment No. 3

The boring logs in the Weiss report should be checked for accuracy. Did the drill rig operator also complete the hand augering? At least one of the boring logs (1019-UST37-B3) defines TPH-G as Total petroleum hydrocarbon as diesel in soil by modified EPA Method 8015.

Response

The Weiss Associates report has been revised to address this comment. The revised report has been provided to the regulatory agencies under separate cover.

Comment No. 4

A spill from an AST located near Building 627 is reported in Addendum A. According to the information given in Addendum A, soil was removed to a depth of approximately 18" by 4 feet wide by 7 feet long in front of the

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generator pad. Samples were not collected following removal of the impacted soil. Soil samples need to be taken from this area to determine the extent of remaining contamination if any.

Response

A soil sample was collected in the area of this AST on January 28, 1997. The location of the sample was not documented in the analytical report. A concentration of 18,000 mg/kg THP was reported; EPA Method 8015m with a reporting limit of 150.0 mg/kg was utilized. The Army is currently developing the scope and schedule for further investigation at this site. The results of these studies will be provided to Cal-EPA and the Lassen County Health Department.

Comment No. 5

Lassen County Health Department will work in consultation with the Regional Board toward closure of the former UST sites.

Response

Comment noted.

**U.S. ENVIRONMENTAL PROTECTION AGENCY
REVIEW COMMENTS ON THE
DRAFT FINAL ENVIRONMENTAL BASELINE SURVEY CERFA REPORT
SIERRA DEPOT REUSE PARCELS
DATED NOVEMBER 1996**

GENERAL COMMENTS

Comment No. 1

Based upon USEPA's experience at March Air Force Base, we are concerned with the possibility of excessive levels of pesticides in the base housing areas. Therefore, USEPA recommends that the Army provide information to USEPA concerning the use and application of pesticides at the Herlong Parcel prior to transfer. This information should include a records search and interview of current/past employees to provide any available information on the types and quantities of pesticides used.

Response

Please refer to the Army's response to the DTSC's General Comment No. 1. The Army will provide this information in the Final EBS/CERFA report.

Comment No. 2, Honey Lake Shoreline Parcel and Airstrip Parcel

The USEPA agrees with CERFA Category 7 designation for the ordnance and explosives (OE) areas; however, EPA considers the delineation of the extent of potential OE, CERFA Category 7 as preliminary at this time. USEPA's final determination of the extent of OE, CERFA Category 7 boundaries will pend receipt and review of forthcoming supporting documentation (i.e., Archives Search Report, Army Corps of engineers and Geophysical Survey, Montgomery Watson).

Response

Please refer to the Army's response to DTSC's General Comment No. 2. The CERFA Category 7 boundaries to be included in the Final EBS/CERFA are extremely conservative, meaning that it includes property which further studies will document the absence of OE. In order to obtain CERFA concurrence for CERFA uncontaminated properties (Categories 1 and 2) at this time, the Army has left the CERFA Category 7 designation unchanged at this time. Additionally, the ASR will be provided to the regulatory agencies in February 1997, and the results of additional studies will be provided at appropriate phases of property transfer.

Comment No. 3, 1.5 Limitations

In paragraph 1.5, HLA lists several "limitations," for example, that USAEC is the only intended beneficiary of HLA's work, and that HLA has not attempted to independently verify certain information. EPA finds this language to be confusing, and it could lead to the perception that the information in the EBS is not reliable. We recommend that USAEC confirm that the EBS has met all the requirements of CERCLA Changed 120H(4), the DOD BRAC Cleanup Plan Guidebook, and any other applicable guidances, and that it is intended for all the purposes for which an assessment is required by CERCLA 120H(4).

Response

The wording in this section has been revised as follows:

This document was prepared for the sole use of HLA's client, the U.S. Army Environmental Center (USAEC), Aberdeen Proving Ground, for the U.S. Army, the intended beneficiary of our work, to support transfer of the SIAD Reuse Parcels, as required by CERCLA 102H(4). No other party should utilize the information contained herein without the prior written consent of HLA.

Although the EBS is a publicly available document, its distribution to other parties does not constitute HLA's consent for those or other parties to rely on the information contained herein. This document may not contain sufficient information for the purposes of other parties.

HLA's professional services for this EBS, including the preparation of this document, were conducted in accordance with practices and procedures generally accepted in the environmental consulting field in northern California at this time; no other warranty is given or implied by this report. This EBS was prepared in accordance with CERCLA 120H(4), the DoD BRA C Cleanup Plan Guidebook, and other applicable guidance documents.

Information about the presence or absence of hazardous substances in the area discussed in this report is based on limited data and observations. Environmental conditions may change over time and may be different from locations where data or samples were collected or observations made. HLA does not and cannot have complete knowledge of environmental conditions in the area discussed.

Furthermore, this report is complete and accurate only to the extent that cited reports and available information are complete and correct and to the extent that all relevant information has been provided to HLA. The purpose of the EBS is to identify and describe available information. In the EBS, HLA has not attempted to independently verify the completeness or accuracy of the information presented, except where noted, or to independently assess the environmental condition of the described area.

SPECIFIC COMMENTS

Comment No. 1, 4.2.1.1. Herlong Parcel

The EBS identifies buildings that are owned by the State of California, but it does not provide information on the age of the buildings for assess for the potential past releases of lead based paint (LBP) to the surrounding soils. If this characterization has been performed by the State of California, then it should be included in the EBS. If this information does not exist, then characterization of these areas should be performed prior to transfer and made available to accepting party(s).

Response

Please refer to the Army's response to DTSC's Specific Comment No. 3.

Comment No. 2, Plates A-1, B-1, and C-1 CERFA Maps

- (a) *The square box in the Airstrip Reuse Parcel designated as Category 3 should be labeled to indicate specific buildings, tanks, or spill areas.*
- (b) *The small arms firing range in the Southwest Reuse Parcel appears to be delineated as Category 7, however it is not labeled. Please clarify by providing a label defining this area on Plates A-1, B-1, and C-1.*
- (c) *The full extent of the CERFA Category 7 unexploded ordnance area appears to be absent east of the Honey Lake East Shoreline parcel and south of the Airstrip Parcel. Plates A-1, B-1, and C-1 should be revised and/or the text should be revised to include the rationale for this discrepancy.*

Response

- a. As noted the Army's response to DTSC's Specific Comment No. 10, specified information is provided in Plate A-2 because of the scale of Plate A-1. The area of the tank spill is now classified as CERFA Category 7, requiring further investigation.
- b. A label for the small arms firing range has been added to Plates A-1, B-1, and C-1.
- c. The full extent of CERFA Category 7 due to OE on the BRAC Reuse Parcels has been noted on the maps. However, the full extent of potential OE on SIAD is appropriately not noted on the maps. as noted in the map titles, the environmental condition and CERFA categories for only the BRAC Reuse parcels in noted on the maps; the environmental condition of areas outside of the BRAC parcel are not included in the study and, therefore, are not included on Plates A-1, B-1, C-1, or any other plates included in the EBS/CERFA report.
- d. As noted in the Army's response to DTSC's Specific Comment No. 12, the text has been revised to indicate that this area was undeveloped prior to the Army's ownership.

Comment No. 3, page C-2, Southwest Corner Reuse Parcel

This section discusses the former owner of the parcel. Please add a discussion of the former uses of the property.

Response

Additional text has been added to the report to note this property was undeveloped.

ADDENDUM A

AIRSTRIIP REUSE PARCEL EBS AND CERFA REPORT

A-1 INTRODUCTION

This addendum to the EBS and CERFA report presents the results of an assessment of known existing environmental conditions for the Airfield Refuse Parcel (Airfield) located within the property boundaries of SIAD, Lassen County, California (Figure A1). This addendum presents information developed subsequent to the submittal of the draft EBS and CERFA Report prepared in April 1996 (HLA, 1996). The organization of this addendum follows that of the main body of the report and does not repeat background information or information describing the physical setting at SIAD. The focus of this addendum is on the environmental conditions of Airfield as they pertain to property transfer. Information presented in this EBS, including information in this addendum, will be used by the Army to identify uncontaminated real property within the SIAD s according to the requirements of CERFA and to support transfer of the property to non-Department of Defense (DoD) use. Categorization according to the seven DoD categories incorporates recent changes to CERCLA as part of the DoD Authorization Act for Fiscal Year 1997, as noted below.

Additional information regarding the purpose and objectives of this EBS is discussed in Section 1.0. General information about SIAD, including the present mission and operation of SIAD today; an overview of SIAD's physical setting, physiographic meteorology, surface water, geology, and hydrogeology are presented in Section 1.0 and 2.0 of the main body of the EBS. The remaining sections of this addendum present specific information for the Airfield Reuse Parcel. The approach to conducting this EBS for the Airfield is presented in Section A.3. The specific results of the EBS and Findings and Conclusions are contained in Sections A.4 and A.5, respectively. The CERFA report for the Airfield is presented in Section A.6. References cited in this addendum are contained in Section A.7.

A.2 PARCEL DESCRIPTION AND HISTORY

This section presents general information about the Airfield, previous and current activities on the parcel, and historical uses of adjacent parcels.

The Airfield is along the extreme northern border of the Main Depot, consisting of approximately 2,228 acres of mostly undeveloped land surrounding a paved Airfield (Figure A1). Prior to construction of the Airfield, the area within the Airfield was reportedly former BLM Land and ranches. The ranches were acquired by several Declarations of Taking by the DoD in the 1940's (Gordon, 1996). Table A1 summarizes the various previous landowners of the airfield parcel. Supporting facilities currently located at the Airfield include Building 627 (an unpainted metal Quonset hut), electrical utility equipment, an aboveground diesel storage tank and a liquid propane tank, and a variable Omni Range radar beacon (VOR). Building 627 was moved from Stead Air Force Base, located near Reno, and onto SIAD in 1966 (Gordon, 1996). The VOR was installed by the Air Force in approximately 1986. The Airfield is occasionally used by SIAD for the arrival and departure of aircraft loaded with offstocks of various mechanical equipment and large storage containers. No transportation of munitions currently is being conducted at the Airfield. During its history of use, the runway has been resurfaced several times, most recently in 1996 (Gordon, 1996). In addition to use by the Army, the Airfield is occasionally used by the Air National Guard for take-off and landing training activities.

The Airfield was constructed in the late 1940s by the Army Air Corps for use as an airplane landing strip to load and unload munitions and equipment for use on SIAD (Gordon, 1996). Aircraft maintenance was not performed at the Airfield and no such facilities currently exist on the parcel. Primary aircraft servicing SIAD were C-130 and C-141 cargo planes. The Airfield was extended in the 1960's to its current length of 7,168 feet. According to Mr. Bill Heyland, former chief of Air Operations, runway lights are present along the shoulder of the Airfield. These lights were reportedly powered until the mid-1980s by diesel powered generators that were mounted on trailers situated alongside the airstrip. These lights are now powered by electricity. Mr. Heyland also stated that aircraft refueling was conducted on the paved portions of the Airfield or on the concrete apron and that no permanent fueling facilities ever existed at the Airfield. During a normal year, 24 planes were refueled with fuel that came from the fuel storage site, approximately 7 miles south of the airfield at the main post area of SIAD. Mr. Heyland stated he was not aware of any major fuel spills reported on the pavement nor that reached the soil.

Review of an aerial photograph found in the files of SIAD Department of Public Works office, dated November 10, 1949, showed railroad tracks formerly crossed through the area encompassing the Airfield in a northwesterly direction. However, no visible signs of the old railroad tracks were observed during a site visit in September 1996. According to Ms. Carol Gordon with SIAD, a former structure, Building 490A, was present on the Airfield immediately south of where Building 627 is currently located. Building 490A was demolished in 1970. No other information was available in the SIAD files.

The area surrounding the Airfield consists of undeveloped property. The parcel is roughly bordered by the East Shoreline Parcel and former Honey Lake Demolition Range to the west, the SIAD boundary to the north, and undeveloped land areas to the south, and east. The Honey Lake Demolition Range was used by SIAD personnel to detonate munitions during the 1940s and 1950s (COE-RI, 1996). No activities are currently ongoing at the former demolition range. Approximately 1,000 feet south of the southwestern portion of the parcel is the Nike Missile Fuel Disposal Site A (Nike A), an area formerly used for disposal of propellants from Nike Ajax Missiles (EPA, 1992). The Nike A site was active for a three to four year period during the 1950s.

Parcel Description and History

Approximately 2,000 feet to the east of the Airfield is the Rail Car Suspect Site. Incoming rail cars loaded with munitions that are suspected of being tampered with are parked here until cleared. No incidents involving munitions have been recorded at the Rail Site and the site is still active (Riess, 1996).

A.3 APPROACH TO CONDUCTING ENVIRONMENTAL BASELINE SURVEYS

This section briefly describes the activities performed for the Airfield EBS. This addendum considers currently available information from various sources including a records search, interviews with SIAD personnel, visual inspections, and evaluations of the potential for adverse impacts from other parcels near the Airfield. Results of these investigations are in Section A.4 of this addendum.

Records Search

Records reviewed included the COE-RI report entitled *Ordnance and Explosives, Archive Search Report, Conclusions and Recommendations for the Honey Lake Range* dated September 1996, regarding OE issues at the parcel; Environmental Science Associates, Inc. (ESA) report entitled *Underground Storage Tank, Risk Assessment Report, Sierra Army Depot, Herlong, California* dated July 11, 1990 regarding the presence of a former UST; the *Preliminary Assessment Review* prepared by the Environmental Protection Agency Region I (EPA) dated September 30, 1992, regarding hazardous waste and IRP Sites; International Technology Corporation's (IT) *Asbestos Abatement Survey at Sierra Army Depot, Herlong, CA* dated June 24, 1988, related to asbestos surveys; and available aerial photographs depicting pertinent historical information. HLA also searched for, but did not locate, laboratory analytical reports, closure documents, and tank tightness tests, related to the removal of the former UST. Files containing site specific spill reports were searched for any spills that occurred on the parcel. No spill reports were found in SIAD files. A diesel leak from an AST fuel line was observed during HLA's site visit on September 19, 1996. Please refer to section A.4 for results of these record searches.

Interviews

The following SIAD personnel were interviewed regarding various pertinent environmental and historical issues in support of this addendum:

- Mr. John Colberg- ACM, LBP, Radon, PCBs
- Mr. Dave Holsey - Petroleum Storage Tanks
- Mr. Andy Riess - OE
- Ms. Susan Getty - SWMUs
- Mr. Bill Heyland - Airfield history
- Ms. Carol Gordon - Prior use, parcel history, building information and construction dates
- Mr. Mike Chastain - Radiological issues

Visual Inspection

HLA personnel performed a site visit during September 1996 to examine the area and review the general condition of buildings or other facilities, such as USTs. Mr. John Colberg of SIAD accompanied HLA on the site visit. Figure A1 shows the location of the Airfield, VOR beacon, Building 627, and other features on the parcel. Information on Figure A1 was verified during the site visit. Observations of the parcel were generally made by walking and driving accessible areas of the property.

As noted above, the Airfield consists mostly of undeveloped land surrounding a paved airstrip with a concrete apron, a VOR beacon, Building 627, utility equipment, propane tank, above ground diesel fuel storage tank (AST). No landscaped areas were observed at any locations on the parcel. All areas were either paved (including the asphalt runway or concrete apron and utility pads) or were natural dirt surfaces with native vegetation. Visual inspection of Building 627 consisted of walking around the outside of the building examining the general condition of exterior building surfaces and any landscaped areas. Because the building was locked and not accessible at the time of the site visit, the interior of Building 627 was evaluated by peering through several windows. The building interior generally consisted of floor tile or linoleum, sheetrock, and paneling. General housekeeping was orderly. No visible evidence of hazardous material storage was observed in or surrounding the building. Visual examination of the VOR beacon building showed it to consist of painted steel siding with no windows. The interior of the VOR beacon was not visible and no access was possible.

Adjacent to Building 627 is a fenced concrete pad with three electrical transformers, various utility equipment, including an electrical generator. Adjacent to the pad is a 500 gallon AST surrounded by a concrete berm. At the time of the site visit, the fuel line connection at the generator was observed to be leaking. Diesel fuel was leaking over the southern edge of the concrete generator pad onto the surrounding gravel and soil. HLA immediately notified SIAD personnel who promptly responded by removing the gravel and soil that was visually impacted and had hydrocarbon odors. According to Mr. Colberg, soil was removed to a depth of approximately 18" by 4 feet wide by 7 feet long in front of the generator pad. Based on the amount of soil removed, Mr. Colberg estimated that approximately 10-15 gallons had spilled. Samples were not collected following removal. The impacted soil was removed offsite.

The remaining portions of the Airfield are undeveloped, of low relief, and consist of sagebrush, rabbit brush, and other native low-growing shrubs and plants. No other structures other than those noted above are currently on the parcel. Former Building 490A, which was located immediately adjacent to Building 627, was demolished in 1970 (Gordon, 1996). No additional information about Building 490A (such as construction dates, use, or type of construction) was available from SIAD.

No stressed vegetation, odors (with exception of the diesel fuel noted above), or air emission sources were noted during the site visit. The results of the visual inspections for specific environmental issues are reported in appropriate portions of Section A.4.

Excluding the diesel fuel line leak, noted earlier, no other environmental conditions were observed during the site visit that appeared to warrant sampling as part of this EBS.

DoD Environmental Conditions of Property

The seven property classifications defined by the DoD BRAC Cleanup Plan (BCP) Guidebook (Fall 1993) were adopted for this report, including this addendum, as discussed in Section 4.0 of the main body of the report. Categorization of property using the 1993 DoD BCP Guidance are consistent with the requirements of CERCLA Section 120 (h)(4). Recent revisions to CERCLA that were included in the Department of Defense Authorization Act for Fiscal Year 1997 included clarification of the meaning of uncontaminated property, resulting in DoD Condition of Property Categories 1 and 2 now being eligible for transfer under CERCLA Section 120(h)(4). A discussion of the CERFA classifications for the Airfield is included below in Section A.6.

A.4 RESULTS OF EBS FOR AIRFIELD REUSE PARCEL

The results of the EBS for the Airfield Reuse parcel, including a discussion of potential impacts from adjoining properties, are presented below. The main body of the report (Section 4.0) presents a general summary of SIAD's program for each of the environmental issues discussed below.

Asbestos

According to the IT report, Building 627 on the Airfield parcel has been surveyed and sampled for ACM. Results of the IT survey indicated that of the samples collected in Building 627, only one non-friable material, a silvery gray sealant, was found to contain ACM. No remedial action was determined to be necessary, other than to include this material in an operations and maintenance (O & M) program. The VOR was not included as part of the IT survey.

Lead-Based Paint

Neither Building 627 nor the VOR beacon were surveyed for LBP. However, Building 627 has metal siding and the building exterior appears to have never been painted. Based on the date Building 627 was moved onto SIAD (1966), interior surfaces may contain LBP. The interior surfaces observed during the site visit were found to be in good condition. The VOR was constructed in 1986 and therefore is assumed not to contain LBP.

Radon

No testing has been performed at the Airfield, however, buildings tested previously on the SIAD installation did not have radon test results above 4 pCi/L (Vail, 1991).

Radiological Survey

According to Mr. Mike Chastain, Chief of the Radiation Protection Division of SIAD, no radiological surveys have been conducted at the Airfield because current and former site activities do not indicate the use of radiological materials at this parcel (Chastain, 1996).

Ordnance and Explosives

The Draft OE Archives Search Report (ASR), Honey Lake Range, (COE-RI, 1996) identified the maximum extent of OE within Honey Lake and the immediately surrounding areas. According to the ASR, the maximum arc dimension, which represents the maximum aerial extent of OE fragments associated with former demolition activities at the Honey Lake Demolition Range, extends onto the western end of the Airfield. This maximum arc distance was developed based on conservative assumptions and no OE surveys have been performed on the parcel. No OE is known to have ever been encountered at the Airfield by facility personnel. This is consistent with the findings of extensive field studies conducted as part of the IRP remedial investigation at the Nike Missile Fuel Disposal Site A (Nike A) by HLA (HLA, 1994) where no OE was encountered. Both during site reconnaissance and sample collection including a soil-gas sampling grid across entire site. OE was not identified to be present at this site, as noted in the RI report (HLA, 1994). The ASR extends the maximum fragment distance across Nike A, as shown in Figure A1.

Polychlorinated Biphenyl's

HLA identified four transformers on the Airfield during the site visit in September, 1996. The locations of these transformers are shown on Figure A1. Three of the four are concrete pad mounted and located adjacent to Building 627. The fourth is a small (16" by 16") single phase transformer mounted to the side of the VOR.

The three transformers adjacent to Building 627 have been sampled for detectable levels of PCBs and were found to be non-PCB containing (Colberg, 1996). The fourth transformer has not been sampled for PCB content. No known releases of dielectric fluids or transformer explosions have occurred on the Airfield (Colberg, 1996). According to Mr. Andy Riess, transformers have not been removed prior to the installation of the existing ones.

Petroleum Storage Tanks

There is one existing 500 gallon AST on the parcel used to fuel a diesel-fired generator associated with Building 627. At the time of HLA's site visit, diesel fuel was leaking from the fuel lines that enter the generator from the AST. Diesel fuel was leaking over the edge of the concrete generator pad onto the surrounding gravel and soil. SIAD personnel indicated that samples were collected and analyzed for petroleum hydrocarbons in January 1997; the laboratory reported a concentration of 18,000 mg/kg TPH in the soil. The exact location of this sample was provided in the analytical report (NEL, 1997). Further study at this site is scheduled for FY 1997. The nearby AST was fenced off and concrete bermed. An eight inch diameter hole was drilled through one corner of the concrete berm floor and appeared to penetrate through to the soil underneath. The hole was filled with murky water at the time of the site visit. No evidence of a release was observed at the AST location at the time of the site visit.

A former UST was removed from the area where the AST is presently located (ESA, 1990). It was used to fuel the diesel-fired generator associated with Building 627. The date the UST was installed is unknown, but was reportedly removed in 1994 (Holsey, 1996). SIAD personnel indicated that samples were collected and analyzed for petroleum hydrocarbons; however, the data are not available in the SIAD files for review.

Solid and Hazardous Waste Management Units

No known SWMUs are located on the Airfield parcel. The nearest SWMU is the Existing Landfill, which is located approximately 6 miles south of the parcel.

Installation Restoration Sites

There are no known IRP Sites identified on the Airfield parcel.

Potential Impacts From Adjoining Properties

The East Shoreline Parcel borders property to the west. OE is present in the East Shoreline parcel (COE-RI, 1996). The Nike Missile Fuel Disposal Site A, an IRP site, is present approximately 1,000 feet south of southwest portion of parcel. A No Action ROD has been signed for this site. The Rail Site is approximately 2,000 feet to the east of the parcel. Incoming rail cars loaded with munitions that are suspected of being tampered with are parked at the Rail Site until cleared. This site is still active and no accidents or releases are known to have occurred (Riess, 1996).

A.5 FINDINGS AND CONCLUSIONS

Findings

This section presents an overview of existing environmental conditions on the Airfield based on available information. Findings of the EBS for the Airfield includes:

- The parcel boundaries used in this study and shown in this report are approximate and are identified on the basis of information provided from SIAD.
- Asbestos surveys were completed on select buildings within the parcel. Non-friable ACM was found in one sample collected from Building 627; non friable ACM was found in Building 627. The VOR was not surveyed for ACM.
- Lead surveys have not been performed for any buildings within the Airfield. Based on it's date of construction, LBP is expected to be present in the interior of Building 627. The exterior of Building 627 appears to have never been painted.
- No testing has been performed on the parcel, however, no buildings on the SIAD installation have been reported to have radon test results above 4 pCi/L (*Vail, 1991*).
- No buildings in the Airfield was identified for radiological surveys.
- The western portion of the Airfield is identified within the maximum arc dimension for potential OE associated with the former Honey Lake Demolition Range. No OE surveys have been conducted for the Airfield and no direct evidence of OE on the parcel is known to exist.
- Three of the four transformers adjacent to Building 627 have been sampled for detectable levels of PCBs and were found to be non-PCB containing (*Colberg, 1996*). The fourth transformer has not been sampled for PCB content. No known releases of dielectric fluids or transformer explosions have occurred on the Airfield Parcel (*Colberg, 1996*). No transformers are known to have been removed prior to the installation of the existing ones.
- No releases of petroleum hydrocarbons have been reported for the UST near Building 627. No closure data are available for this former UST location. A diesel fuel line leak was observed at a generator near Building 627 during HLA's site visit in September 1996. The line was immediately repaired and diesel fuel and impacted soil removed; further study at this site will be conducted in FY 1997.
- SWMUs were not identified within the Airfield.
- IRP sites not identified within the Airfield.
- No groundwater monitoring wells are present on the Airfield.
- None of the identified environmental conditions on adjoining properties are reported to affect environmental conditions within the Airfield for the purposes of property transfer.

Conclusions

Available information regarding the environmental conditions on the Airfield has been assembled and reviewed as it pertains to transferability of the property under the requirements of CERCLA § 120(h)(3)

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Available information regarding the environmental conditions on the Airfield has been assembled and reviewed as it pertains to transferability of the property under the requirements of CERCLA § 120(h)(3) or (4) or based on Army or DoD policy regarding other safety concerns. Based on the findings of this EBS presented in the previous section, the following conclusions are made:

- A release of petroleum products (diesel) was observed near AST 627 in September 1996. Confirmation of TPH release to soil was made in January 1997 (*NEL*, 1997); further study at this site will be conducted. No other releases of hazardous substances or petroleum products or their derivatives are known to have occurred on the parcel
- Storage of hazardous substances and petroleum hydrocarbons on the parcel occurred at a former UST, a current AST, and four electrical transformers
- ACM surveys found non-friable ACM in Building 627
- LBP is likely to exist within the interior of Building 627. The exterior of the building is unpainted.
- The parcel is within the maximum arc dimension of the former Honey Lake Demolition Range and OE may exist on the parcel, although OE has not been reported on the parcel to date.
- The potential for OE associated with the former Honey Lake Demolition Range may have an impact on the extreme western portion of the Airfield .
- Information compiled in this EBS are discussed in the following section, Section A.6, CERFA, and are interpreted and categorized according to the 1993 DoD Categories 1 through 7, including recent revisions to the DoD Categories contained in the DoD Authorization Act for Fiscal Year 1997.

A.6 COMMUNITY ENVIRONMENTAL RESPONSE FACILITATION ACT (CERFA) REPORT

This section presents the DoD Category(s) for the Airfield. Section 6.0 of the main body of this report discusses the CERFA program, including the general purpose of CERFA legislation, the effect of the legislation on real property transfer, and the findings of the SIAD CERFA investigation for the Herlong and Honey Lake parcels.

The environmental issues of concern identified for the Airfield were evaluated to classify subareas of each parcel according to DoD Categories 1 through 7, as discussed in Section 3.7. As shown on Plate A.1, and considering available information, most of the Airfield is DoD Category 1, uncontaminated. The area of the former UST where only storage of petroleum hydrocarbons has been identified, which coincides with the area of the lead at AST-627, is considered Category 7 because release of TPH above regulatory levels has been documented and further study is required. The western portion of the parcel is considered Category 7 because of the potential for OE in that area.

A.7 REFERENCES

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- Riess, A.G., 1996. Director of Public Works, Sierra Army Depot. Personal Communication with Ashley Valentine, Harding Lawson Associates. September, October, and November.
- U.S. Army Corps of Engineers, Rock Island District (COE-RI), 1996. Ordinance and Explosives, Archives Search Report. Findings, Conclusions, and Recommendations for the Honey Lake Range. September.
- U.S. Environmental Protection Agency (EPA), 1992. Preliminary Assessment Review. September 30.

**Table A1
Summary of Previous Landowners
Environmental Baseline Survey
Airfield Reuse Parcel
Lassen County, California**

Tract 1
Frank E. Palin
Declaration of Taking (D/T) No. 4 (Civil Action 4441) 5/27/42

Tract 4
Estate of R.M. Rankin, et al
D/T No. 3 (Civil Action 444) 5/19/42

Tract 5
Estate of Augusta J. Gonzales, et al
D/T No. 3 (Civil Action 444) 5/19/42

Tract 6
Estate of James L. Humphrey
D/T No. 1 (Civil Action 444) 5/19/42

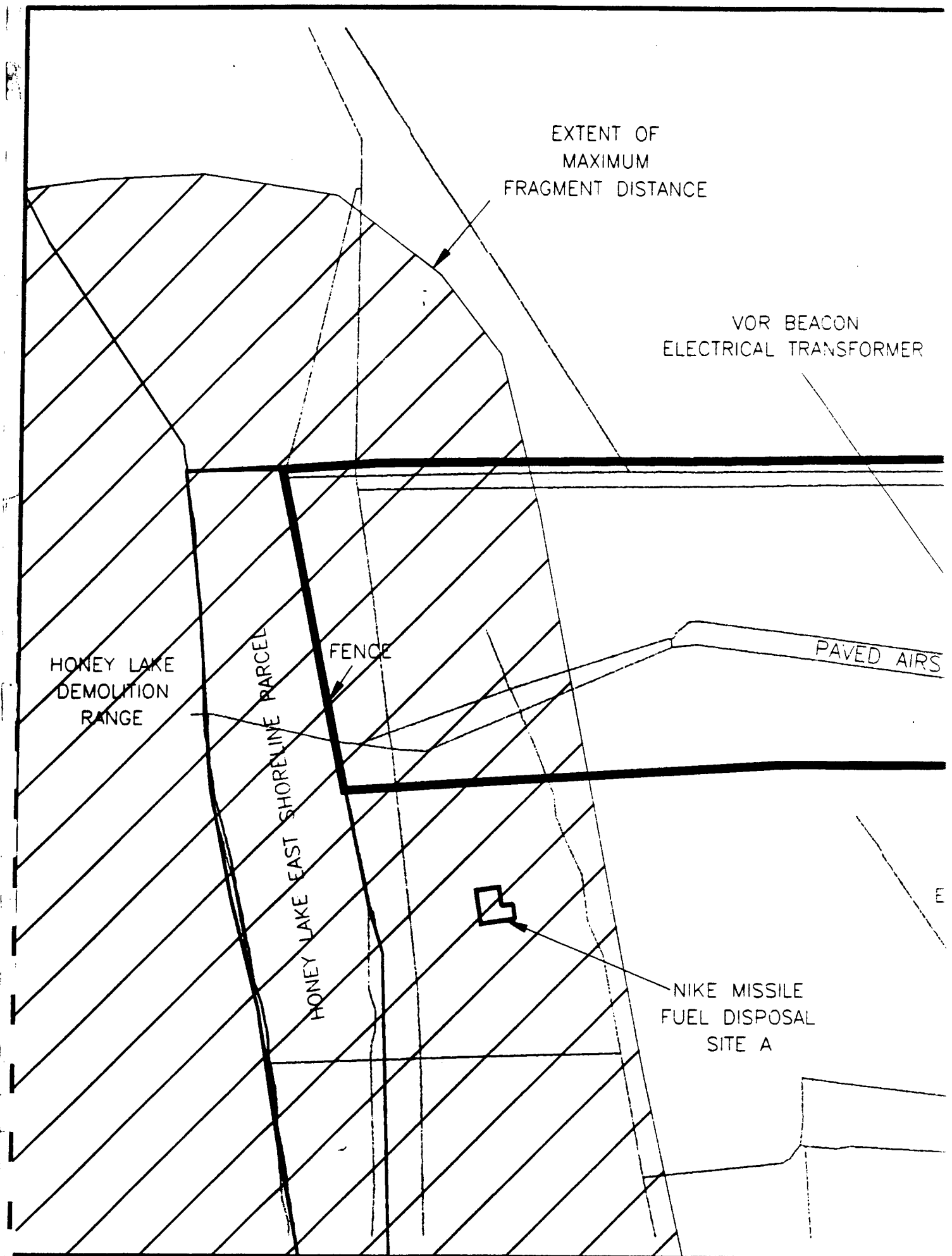
Tract 7
Charles H. Green
D/T No. 4 (Civil Action 444) 5/27/42

Tract 8
James W. Mapes
D/T No. 3 (Civil Action 444) 5/19/42

Tract 10
Hiram W. Humsaker
D/T No. 3 (Civil Action)

Tract 11
Estate of Edward Wolf, et al
D/T No. 1 (Civil Action 4451) 5/22/42

Tract D
Bureau of Land Management
1944



EXTENT OF
MAXIMUM
FRAGMENT DISTANCE

VOR BEACON
ELECTRICAL TRANSFORMER

HONEY LAKE
DEMOLITION
RANGE

HONEY LAKE EAST SHORELINE PARCEL

FENCE

PAVED AIRS

NIKE MISSILE
FUEL DISPOSAL
SITE A

VOR BEACON
RICAL TRANSFORMER

PAVED AIRSTRIP

AST &
FORMER UST

SITE FOR
SUSPECT
RAIL CARS

UTILITY PAD
ELECTRICAL GENERATOR
ELECTRICAL TRANSFORMERS

BLDG. 627

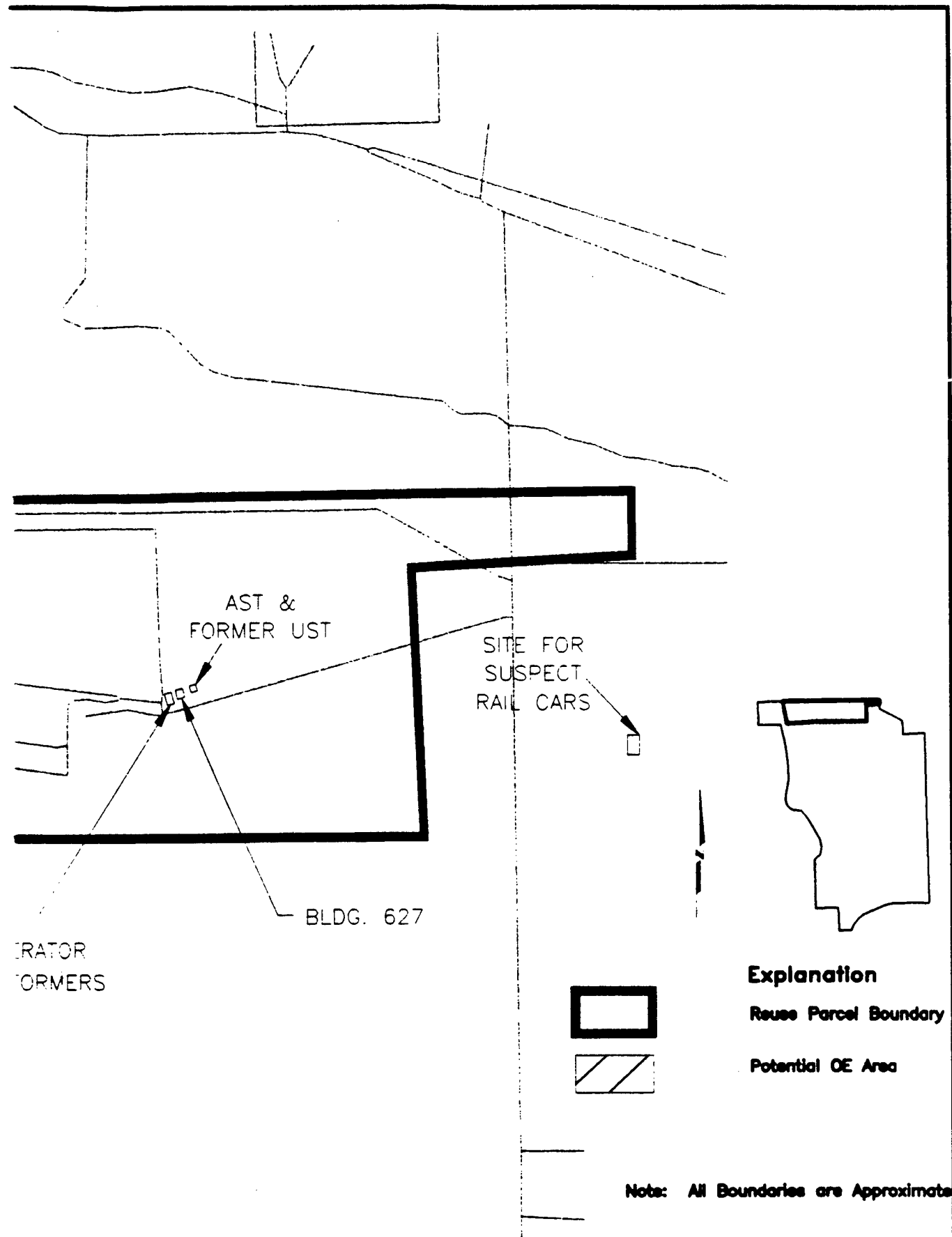


Not

MISSILE
DISPOSAL
TE A

Prepared for:
U.S. Army Environmental Center
Aberdeen Proving Ground, Maryland
Sierra Army Depot, Lassen County, California

Figure A1
Location Map
Airfield Reuse P



red for:
 Army Environmental Center
 ean Proving Ground, Maryland
 Army Depot, Lassen County, California

Figure A1
Location Map
Airfield Reuse Parcel

Honey Lake Demolition Range

Airfield

□ Nike Missile Fuel
Disposal Site A

East Shoreline

□ Toxic Storage
Building 578

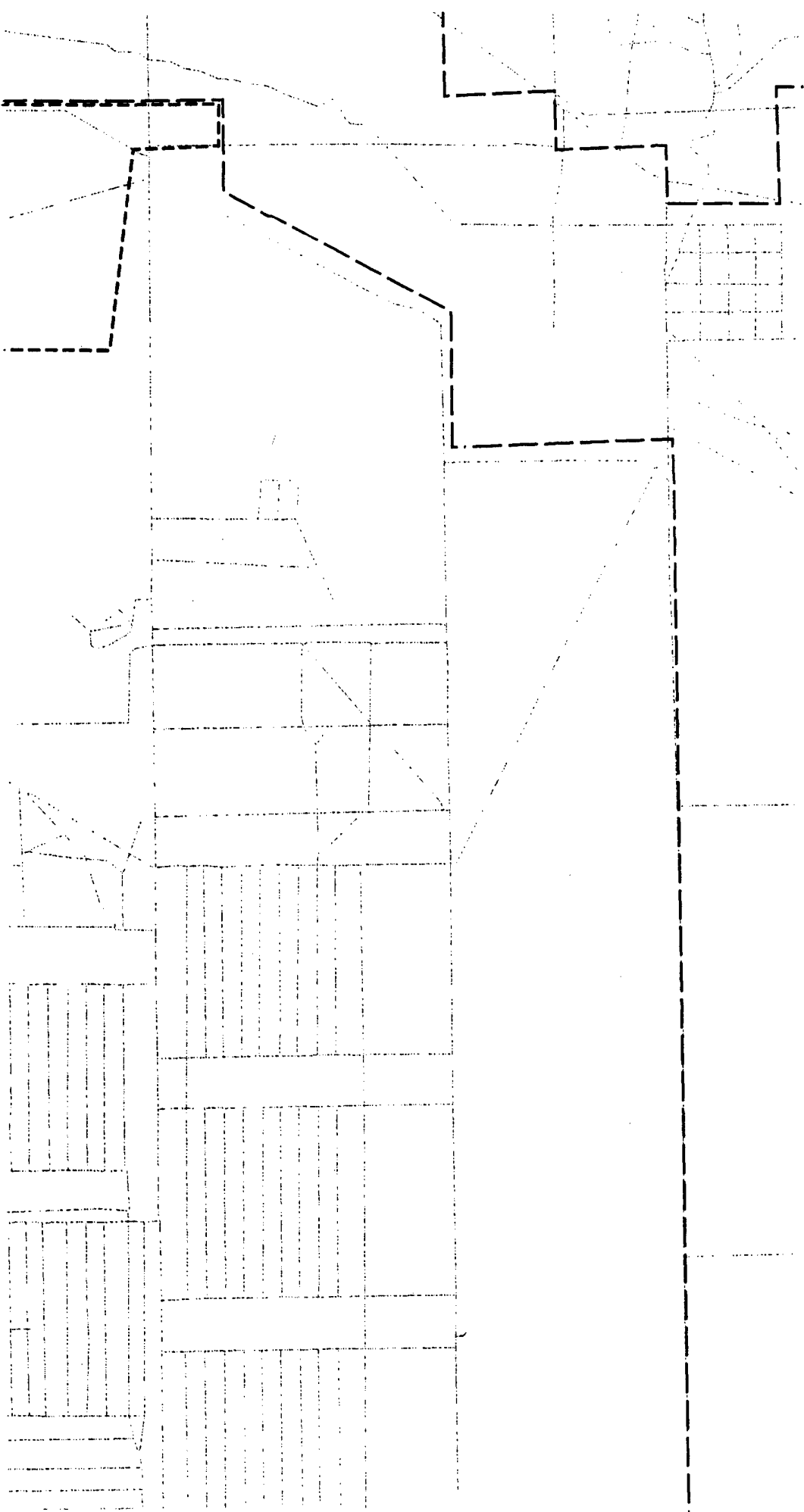
①

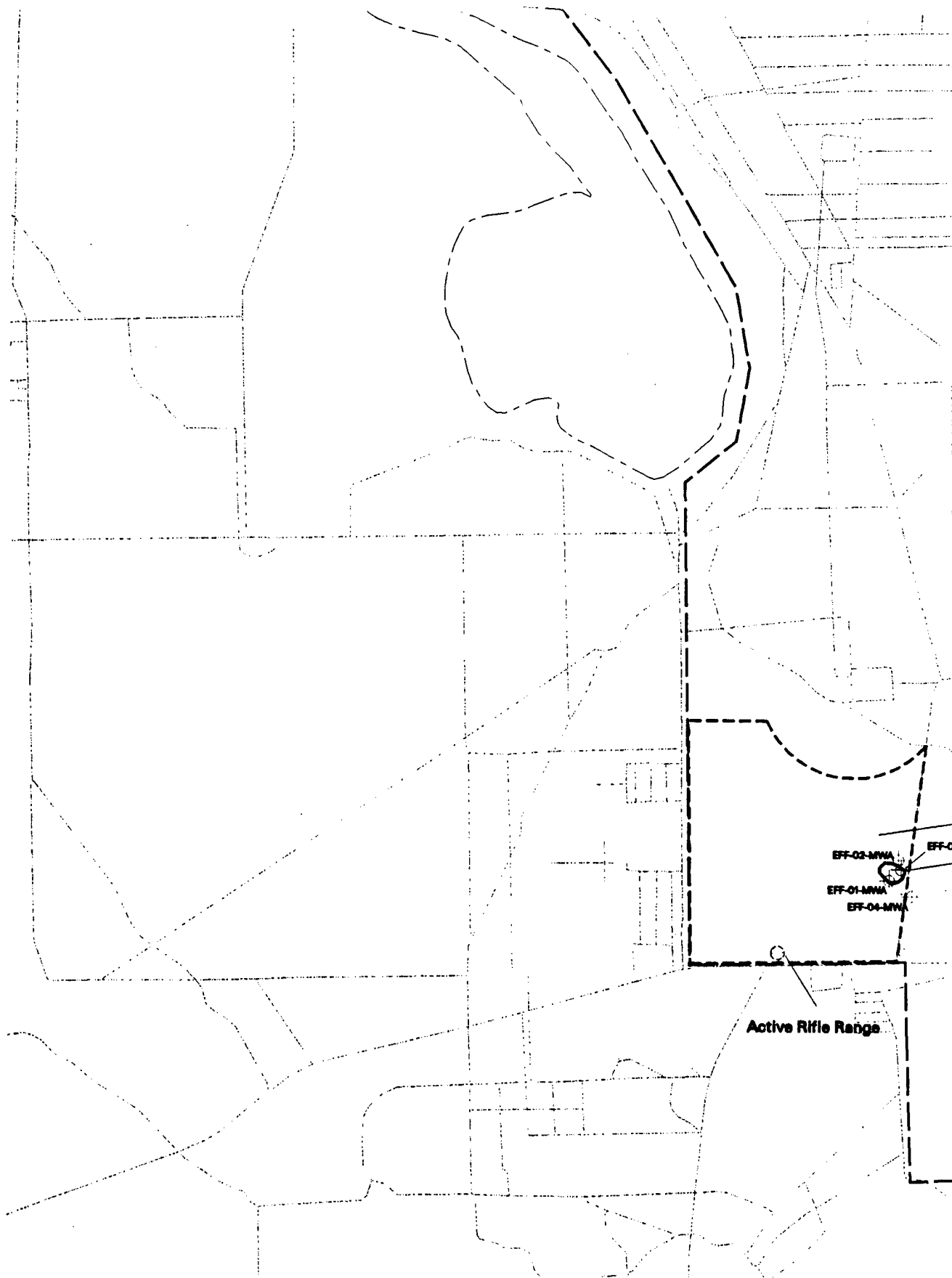
Airfield

**Fuel
ite A**

areline

**Todo Storage
Building 578**



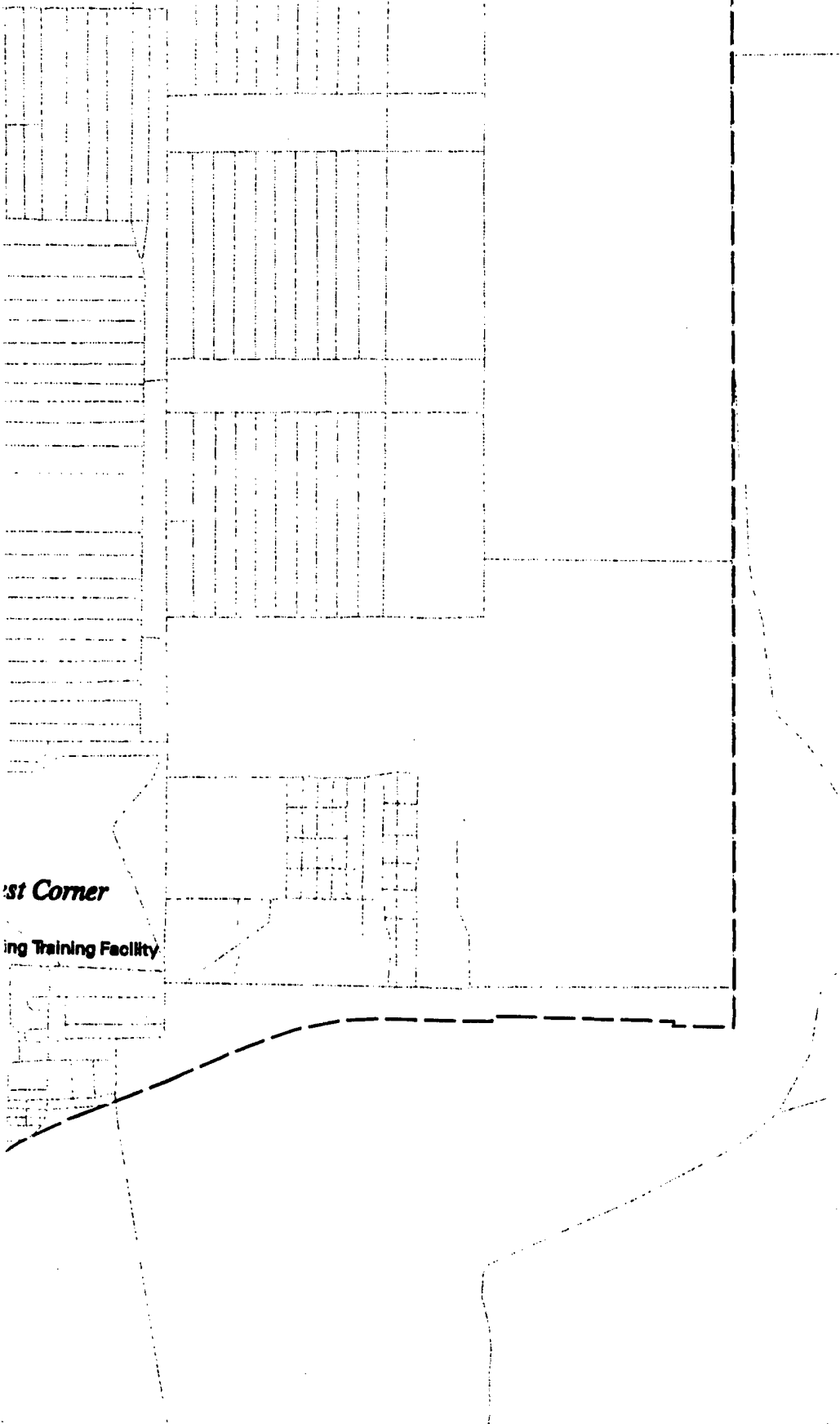


EXPLANATION

Department of Defense Environmental Condition (DoD, 1993)

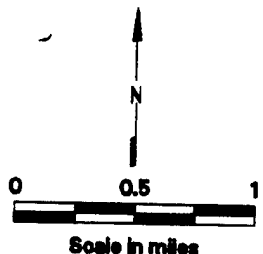
- Category 1: Areas where no storage, release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)
- Category 2: Areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred)
- Category 3: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require removal or remedial action

4

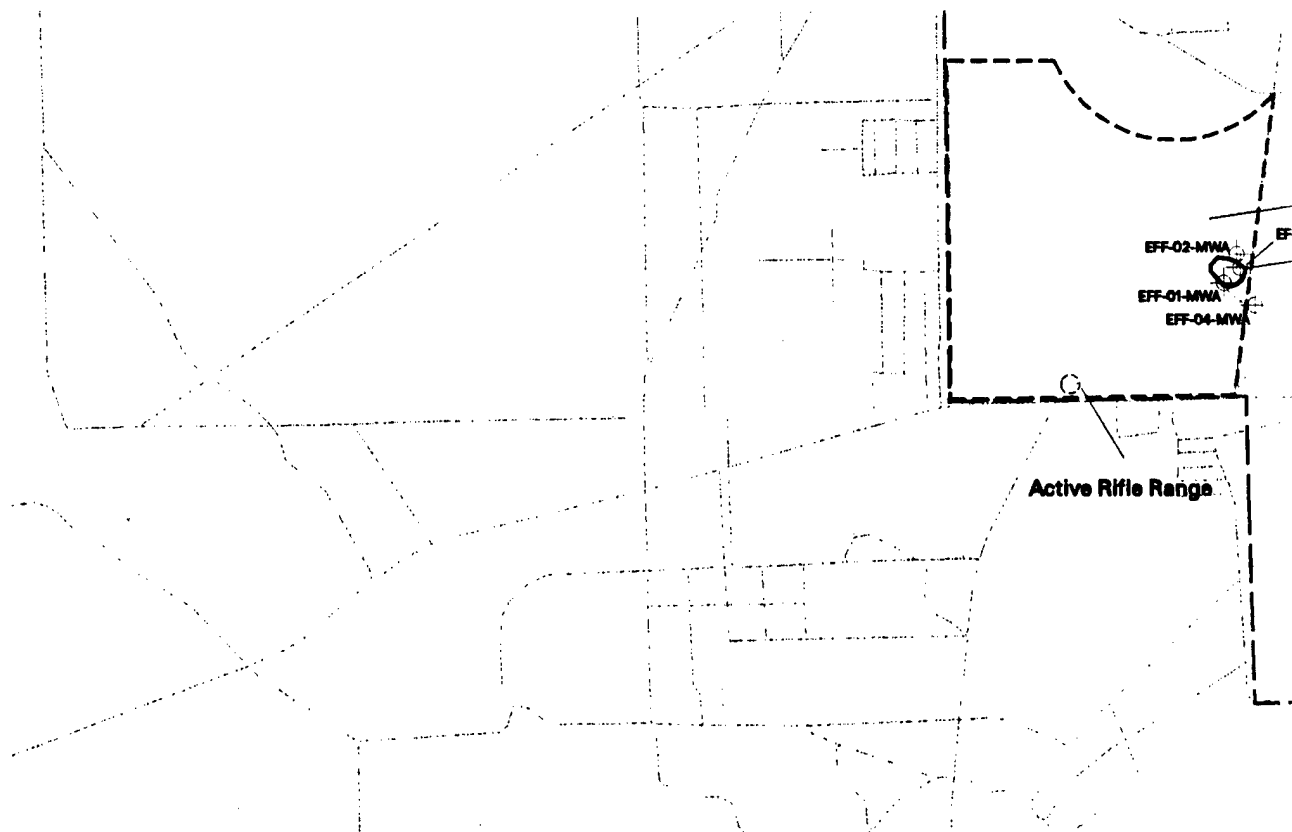


West Corner
ing Training Facility

the Honey Lake Boundary
boundary per USGS topographic map
at Shoreline, and
Corner BRAC parcel boundaries










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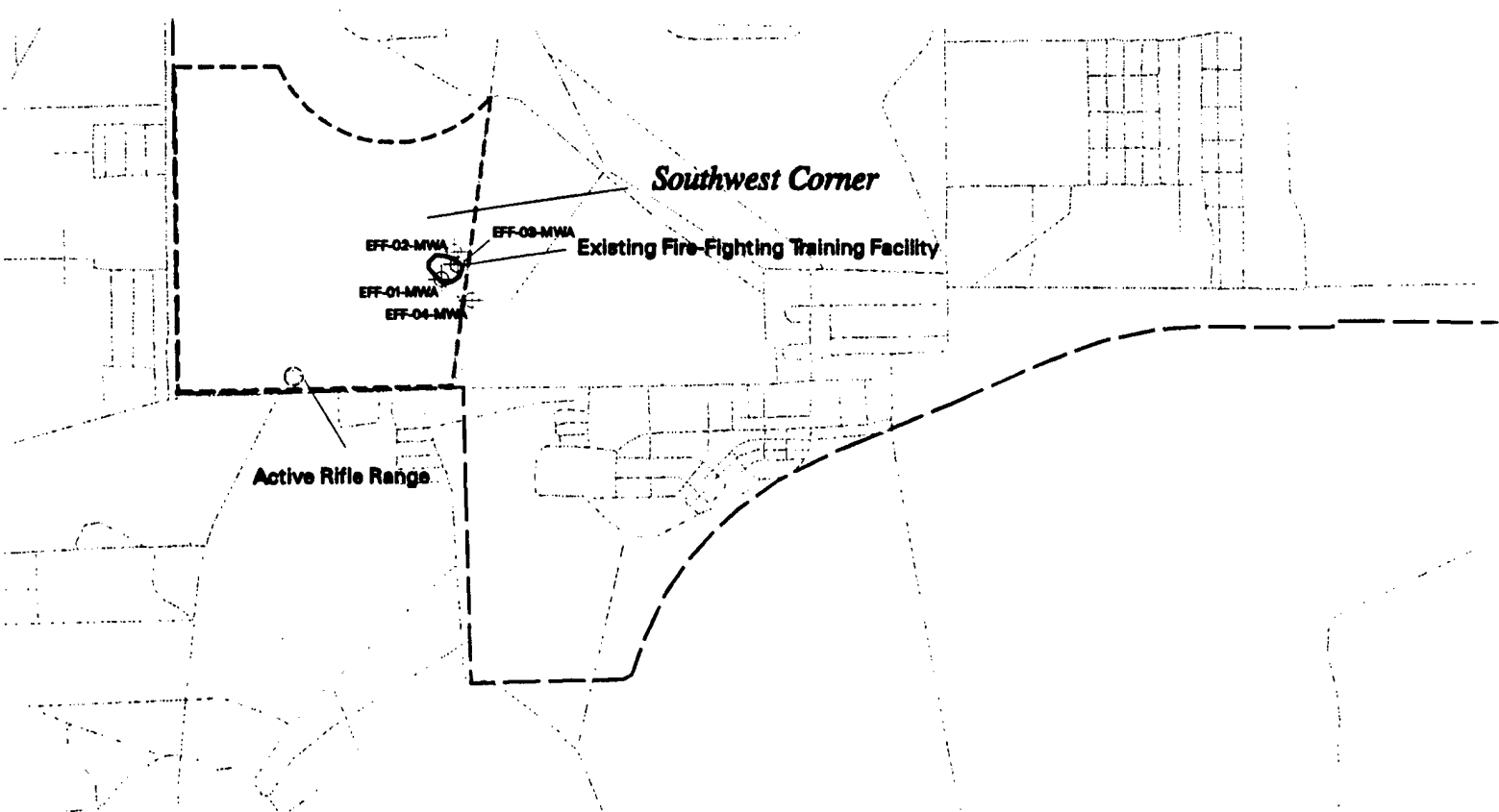


EXPLANATION

Department of Defense Environmental Condition (DoD, 1993)

-  Category 1: Areas where no storage, release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)
-  Category 2: Areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred)
-  Category 3: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require removal or remedial action
-  Category 4: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken
-  Category 5: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are under way, but all required remedial actions have not yet been taken
-  Category 6: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented
-  Category 7: Areas that are unevaluated or require additional evaluation

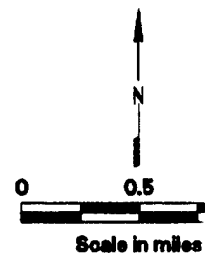
Note: Property boundaries indicated are approximate and are not intended to represent the legal description of the parcel(s).



EXPLANATION

- substances or petroleum (in adjacent areas)
 - petroleum products has occurred (d)
 - f hazardous substances or require removal or remedial action
 - f hazardous substances or to protect human health and the
 - f hazardous substances or under way, but all required remedial
 - f hazardous substances or not yet been implemented
- present the legal description of the parcel(s).

- Approximate Honey Lake Boundary
- Installation boundary per USGS topographic map
- Airfield, East Shoreline, and Southwest Corner BRAC parcel boundaries
- Roads
- IRP Site
- ⊕ Monitoring Well



Source: Parcel, shoreline, and property boundaries from SIAD Environmental Management Division



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Engineering and Environmental Services

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East Sh
Sierra /
Lassen

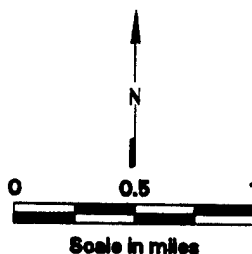
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Southwest Corner

Existing Fire-Fighting Training Facility

- - - Approximate Honey Lake Boundary
- Installation boundary per USGS topographic map
- - - Airfield, East Shoreline, and Southwest Corner BRAC parcel boundaries
- Roads
- IRP Site
- Monitoring Well

Source: Parcel, shoreline, and property boundaries from
SIAD Environmental Management Division



Harding Lawson Associates
Engineering and
Environmental Services

**CERFA Map of
South West Corner, Airfield, and
East Shoreline Parcels
Sierra Army Depot
Lassen County, California**

PLATE

A-1

DRAWN
SAS

JOB NUMBER
32100 11.05.00

APPROVED

DATE
11/25/96

REVISED DATE
2/14/97

9

ADDENDUM B

EAST SHORELINE REUSE PARCEL EBS AND CERFA REPORT

B.1 INTRODUCTION

This addendum to the EBS and CERFA report presents the results of an assessment of known existing environmental conditions for the East Shoreline Reuse Parcel located within the property boundaries of SIAD, Lassen County, California (Figure B.1). This addendum presents information developed subsequent to the submittal of the Draft EBS and CERFA Report prepared in April 1996 (HLA, 1996). The organization of this addendum follows that of the main body of the report and does not repeat background information or information describing the physical setting at SIAD. The focus of this addendum is the environmental conditions of the East Shoreline Reuse Parcel as they pertain to property transfer. Information presented in this EBS, including information in this addendum, will be used by the Army to identify uncontaminated real property within the SIAD Reuse Parcels according to the requirements of CERFA and to support transfer of the property to non-Department of Defense (DoD) use. Categorization according to the seven DoD categories incorporates recent changes to CERCLA as part of the DoD Authorization Act for Fiscal Year 1997, as noted below.

Additional information regarding the purpose and objectives of this EBS is discussed in Section 1.0. General information about SIAD, including the present mission and operation of SIAD today; an overview of SIAD's physical setting, physiographic meteorology, surface water, geology, and hydrogeology are presented in Section 1.0 and 2.0 of the main body of EBS report. The remaining sections of this addendum present specific information for the East Shoreline Reuse Parcel. The approach to conducting this EBS for the East Shoreline Reuse Parcel is presented in Section B.3. The specific results of the EBS and Findings and Conclusions are contained in Sections B.4 and B.5, respectively. The CERFA report for the East Shoreline Reuse Parcel is presented in Section B.6. References cited in this addendum are contained in Section B.7.

B.2 PARCEL DESCRIPTION AND ORAL HISTORY

This section presents relevant descriptive information about the East Shoreline Reuse Parcel, previous and current activities on the parcels, and historical uses of adjacent parcels.

The East Shoreline Reuse Parcel consists of approximately 967 acres of undeveloped land located on the northwestern portion of the Main Depot. Approximately two-thirds of the parcel is considered to have confirmed and potential OE (COE-RI, 1996). According to the Archive Search Report (ASR), SIAD personnel began using the Honey Lake Demolition Range, an IRP site adjacent to this parcel, in approximately 1946. Excess or unserviceable ammunition was either blown up (detonated) or burned. The Honey Lake Demolition Range was closed around 1952 when the lake filled, though there were apparently some occasional blasts in the mid-1950s (COE-RI, 1996). No activities are currently ongoing at the parcel or the Honey Lake Demolition Range.

According to Ms. Carol Gordon with SIAD, former structures were located on the northern portion of the parcel included an observation station, storage building, observation house, two office buildings, and a gun platform. These structures were constructed in approximately 1956 and demolished between 1961 and 1970. Records on file at SIAD indicate these structures were all constructed of wood (Gordon, 1996).

Review of an aerial photograph found in the files of SIAD Department of Public Works office, dated October 31, 1954, indicates the presence of approximately five or six structures located on the northern portion of the parcel (Figure B.1).

The East Shoreline Reuse Parcel was formerly ranches, Bureau of Land Management (BLM) land, and State of California property. The ranches and State of California property were acquired by several Declarations of Taking by the DoD in the 1940s and 1990s. Table B1 summarizes the various previous land owners of the East Shoreline parcel prior to construction of the airstrip.

The area surrounding the East Shoreline Parcel consists of the Airfield Reuse Parcel and undeveloped SIAD property to the east, and Honey Lake to the south and west. OE is confirmed to be present in the northeastern areas of Honey Lake. The SIAD property boundary and undeveloped land is to the north.

Approximately 2,500 feet to the east of the middle portion of the parcel is the former EOD Training Area. The Toxic Storage Building 578 is approximately one mile east of the middle portion of the parcel (see Figure B.1). The Nike Missile Fuel Disposal Site A is located 0.5 miles east of the East Shoreline Parcel eastern boundary.

B.3 APPROACH TO CONDUCTING ENVIRONMENTAL BASELINE SURVEYS

This section briefly describes the activities performed for the East Shoreline Reuse Parcel EBS. This addendum considers currently available information from various sources including a records search, interviews with SIAD personnel, visual inspections, and evaluations of the potential for adverse impacts from other parcels near the East Shoreline Reuse Parcel. Results of these investigations are in Section B.4 of this addendum.

Records Search

Records reviewed included the COE-RI report entitled *Ordnance and Explosives, Archive Search Report, Conclusions and Recommendations for the Honey Lake Range* dated September 1996, regarding OE issues at the parcel; *Preliminary Assessment Review* prepared by the EPA dated September 30, 1992, regarding adjacent hazardous waste sites; and available aerial photographs depicting pertinent historical information. Files containing site specific spill reports were searched for any spills that occurred on the parcel; none were found.

Interviews

The following SIAD personnel were interviewed regarding various pertinent environmental and historical issues in support of this addendum:

- Mr. John Colberg- ACM, LBP, Radon, PCBs
- Mr. Dave Holsey - Petroleum Storage Tanks
- Mr. Andy Riess - OE
- Ms. Susan Getty - SWMUs
- Ms. Carol Gordon - Prior Use, Parcel History, Construction dates
- Mr. Mike Chastain - Radiological issues

Visual Inspection

HLA personnel performed a site visit during September 1996 to review areas of potential environmental concern related to the use, storage, generation, or disposal of hazardous materials on the East Shoreline Reuse Parcel. Observations of the parcel were made by walking and driving accessible areas of the property.

The East Shoreline parcel consists of undeveloped shoreline land of low relief consisting of sagebrush, rabbitbrush, and other native low-growing shrubs and plants. During the site visit, HLA observed various forms of OE such as metal fragments, magazine clips, and bullets on the ground in the northern portion of the parcel. Remnants of the former gun platform, a berm, and a function test booth were also observed. No buildings were observed on the parcel.

No stressed vegetation, odors, or air emission sources were noted during the site visit in September 1996. The results of the visual inspections for specific environmental issues are reported in appropriate portions of Section B.4.

Sampling

No sampling was performed in support of the EBS. A number of sampling activities, including those associated with adjacent former hazardous waste sites have been completed or are ongoing and were used in support of the EBS.

DoD Environmental Conditions of Property

The seven property classifications defined by the DoD BRAC Cleanup Plan (BCP) Guidebook (Fall 1993) were adopted for this report, including this addendum, as discussed in Section 4.0 in the main body of the report. However, categorization of property consistent with the requirements of CERCLA Section 120 (h)(4), considered certain recent revisions to CERCLA that were included in the Department of Defense Authorization Act for Fiscal Year 1997. These changes included a clarification of the meaning of uncontaminated property, resulting in DoD Condition of Property Categories 1 and 2 now being eligible for transfer under CERCLA Section 120(h)(4). A discussion of the CERFA classifications for the East Shoreline Reuse Parcel is included below in Section B.6.

B.4 RESULTS OF EBS FOR EAST SHORELINE REUSE PARCEL

The results of the EBS for the East Shoreline Reuse parcel, including a discussion of potential impacts from adjoining properties, are presented below. The main body of the report (Section 4.0) presents a general summary of SIAD's program for each of the environmental issues discussed below.

Asbestos

Because no existing buildings are within the property boundaries of the East Shoreline Parcel (Colberg, 1996), no testing was performed. Former structures on the parcel were demolished between 1961 and 1970.

Lead Based Paint

Because no existing buildings are within the property boundaries of the East Shoreline Parcel (Colberg, 1996), no testing was performed.

Radon

No testing has been performed on the parcel, however, no buildings on the SIAD installation had radon test results above 4 pCi/L (Vail, 1991).

Radiological Survey

According to Mr. Mike Chastain, Chief of the Radiation Protection Division of SIAD, no radiological surveys have been conducted at the East Shoreline parcel. Site activities do not indicate the use of radiological materials at this parcel (Chastain, 1996).

Ordinance and Explosives

The Draft OE Archives Search Report for Honey Lake Range (ASR), identified certain types of OE that are present in an area covering approximately 2/3 of the parcel (Figure B.1), encompassing the area within the maximum arc distance discussed in Addendum A. Other types of OE were also determined to be potentially present in the same area.

Polychlorinated Biphenyl's

No known transformers currently exist, nor did ever exist, on the East Shoreline Parcel (Colberg, 1996).

Petroleum Storage Tanks

No known USTs or ASTs currently exist, nor did ever exist, on the East Shoreline Parcel (Holsey, 1996)

Solid and Hazardous Waste Management Units

No known SWMUs are located on the East Shoreline Parcel. The nearest SWMU is the Existing Landfill, which is located approximately 3 miles south of the parcel.

Installation Restoration Sites

There are no IRP sites within the East Shoreline parcel.

Potential Impacts From Adjoining Properties

Honey Lake Demolition Range borders the parcel to the west. OE is present west of parcel where both demolition and ordnance training activities took place (COE-RI, 1996). The Airfield parcel borders on

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the east; considering the maximum arc distance developed in the ASR, OE may be present in western edge of Airfield parcel. Toxic Storage Building 578 is approximately 1 mile east of middle portion of parcel. A No Action ROD for the Toxic Storage Building 578 has been signed. Former EOD training area is approximately 2,500 feet to the east of middle portion of parcel. The ASR report confirms the presence of OE in this area. The No Action ROD for the Nike Missile Fuel Disposal Site A was signed by the State of California DTSC, RWQCB, and Army representatives in September 1995.

B.5 FINDINGS AND CONCLUSIONS

Findings

This section presents an overview of existing environmental conditions on the East Shoreline Parcel Reuse Parcel based on available information. Available information concerning the environmental conditions on the East Shoreline Reuse Parcel has been gathered and summarized in this addendum. Findings of the EBS for the East Shoreline Reuse Parcel includes:

- The parcel boundaries used in this study and shown in this report are approximate and are identified on the basis of information provided from SIAD.
- Because no buildings currently exist on the parcel, no surveys for ACM, LBP, radon, or radiological surveys are necessary.
- The Draft ASR identified the northern 2/3 of the parcel as an OE area based on its proximity to the former Honey Lake Demolition Range. Additionally, OE was observed on the ground surface during a site visit in September 1996.
- No electrical transformers currently exist, nor did ever exist, on the parcel.
- No USTs or ASTs currently exist, nor did ever exist, on the East Shoreline Parcel.
- No SWMUs were identified within the East Shoreline Parcel.
- No IRP sites are identified under the SIAD IRP within the East Shoreline Parcel.
- No groundwater monitoring wells are present on the East Shoreline Parcel.
- The former Honey Lake Demolition Range is adjacent to the western boundary of the East Shoreline Parcel. OE is known to exist within the former demolition range and within the western portion of the East Shoreline parcel adjacent to the demolition range.

Conclusions

Available information regarding the environmental conditions on the East Shoreline Reuse Parcel has been assembled and reviewed as it pertains to transferability of the property under the requirements of CERCLA § 120(h)(3) or (4) or based on Army or DoD policy regarding other safety concerns. Based on the findings of this EBS presented in the previous section, the following conclusions are made:

- No buildings currently exist on the parcel.
- No known areas of storage of hazardous substances and petroleum hydrocarbons are known to have existed on the East Shoreline Parcel
- The parcel is adjacent to and within the maximum fragment distance of the former Honey Lake Demolition Range and OE is known to exist on the parcel.
- Information compiled in this EBS are discussed in the following section, Section A.6, CERFA, and are interpreted and categorized according to the DoD Categories 1 through 7, including recent revisions to the DoD Categories contained in the DoD Authorization Act for Fiscal Year 1997.

B.6 COMMUNITY ENVIRONMENTAL RESPONSE FACILITATION ACT (CERFA) REPORT

This section presents the DoD Category(s) for the East Shoreline Reuse Parcel. Section 6 of the main body of the text discusses the CERFA program, including the general purpose of CERFA legislation and the effect of the legislation on real property transfer. For this parcel:

The environmental issues of concern identified for the East Shoreline Reuse Parcel were evaluated to classify subareas of each parcel according to DoD Categories 1 through 7, as discussed in Section 3.7. As shown on Plate B-1, and considering available information, the southern 1/3 of the East Shoreline Reuse Parcel is DoD Category 1, uncontaminated. The northern 2/3 of the parcel is considered Category 7 because of the potential for OE in that area.

B.7 REFERENCES

- Chastain, Mike, 1996. Sierra Army Depot, Environmental Management Division. Personal communication with Ashley Valentine, Harding Lawson Associates. September 19.
- Colberg, John, 1996. PCB, LBP, Asbestos, and Radon Program Manager, Sierra Army Depot Environmental Management Department. Personal communication with Ashley Valentine, Harding Lawson Associates. September, October, and November.
- Environmental Science Associates, Inc. (ESA), 1990. *Underground Storage Tank, Risk Assessment Report, Sierra Army Depot, Herlong, California*. July 11.
- Getty, Susan, 1996. RCRA, Landfill Program Manager, Sierra Army Depot Environmental Management Department. Personal communication with Ashley Valentine, Harding Lawson Associates. September 1996.
- Gordon, Carol, 1996. Sierra Army Depot, Real Property Specialist. Personal communication with Ashley P. Valentine and Stephen M. Farley. Harding Lawson Associates. September and October.
- Harding Lawson Associates (HLA), 1994. Final Remedial Investigation for the Group III B Sites, Sierra Army Depot.
- Harding Lawson Associates (HLA), 1996, Draft Environmental Baseline Survey, CERFA Report, Herlong and Honey Lake Reuse Parcels, Sierra Army Depot, Lassen County, California. April.
- Holsey, Dave, 1996. UST Program Manager, Sierra Army Depot Environmental Management Department. Personal communication with Ashley Valentine, Harding Lawson Associates. October.
- International Technology Corporation (IT), 1988. *Asbestos Abatement Survey at Sierra Army Depot, Herlong, California*. June 24.
- Riess, A.G., 1996. Director of Public Works, Sierra Army Depot. Personal Communication with Ashley Valentine, Harding Lawson Associates. September, October, and November.
- U.S. Army Corps of Engineers, Rock Island District (COE-RI), 1996. Ordnance and Explosives, Archives Search Report. Findings, Conclusions, and Recommendations for the Honey Lake Range. September.
- U.S. Environmental Protection Agency (EPA), 1992. Preliminary Assessment Review. September 30.

**Table B1
Summary of Previous Landowners
Environmental Baseline Survey
East Shoreline Reuse Parcel
Lassen County, California**

Tract 1
Frank E. Palin
Declaration of Taking (D/T) No. 4 (Civil Action 4441) 5/27/42

Tract 3
State of California
Purchased by Department of the Army 5/5/92

Tract 24
Mrs. Rose Edwards
D/T No. 2 (Civil Action 4441) 5/19/42

Tract 26
James and Catherine Lally
D/T No. 2 (Civil Action 4441) 5/19/42

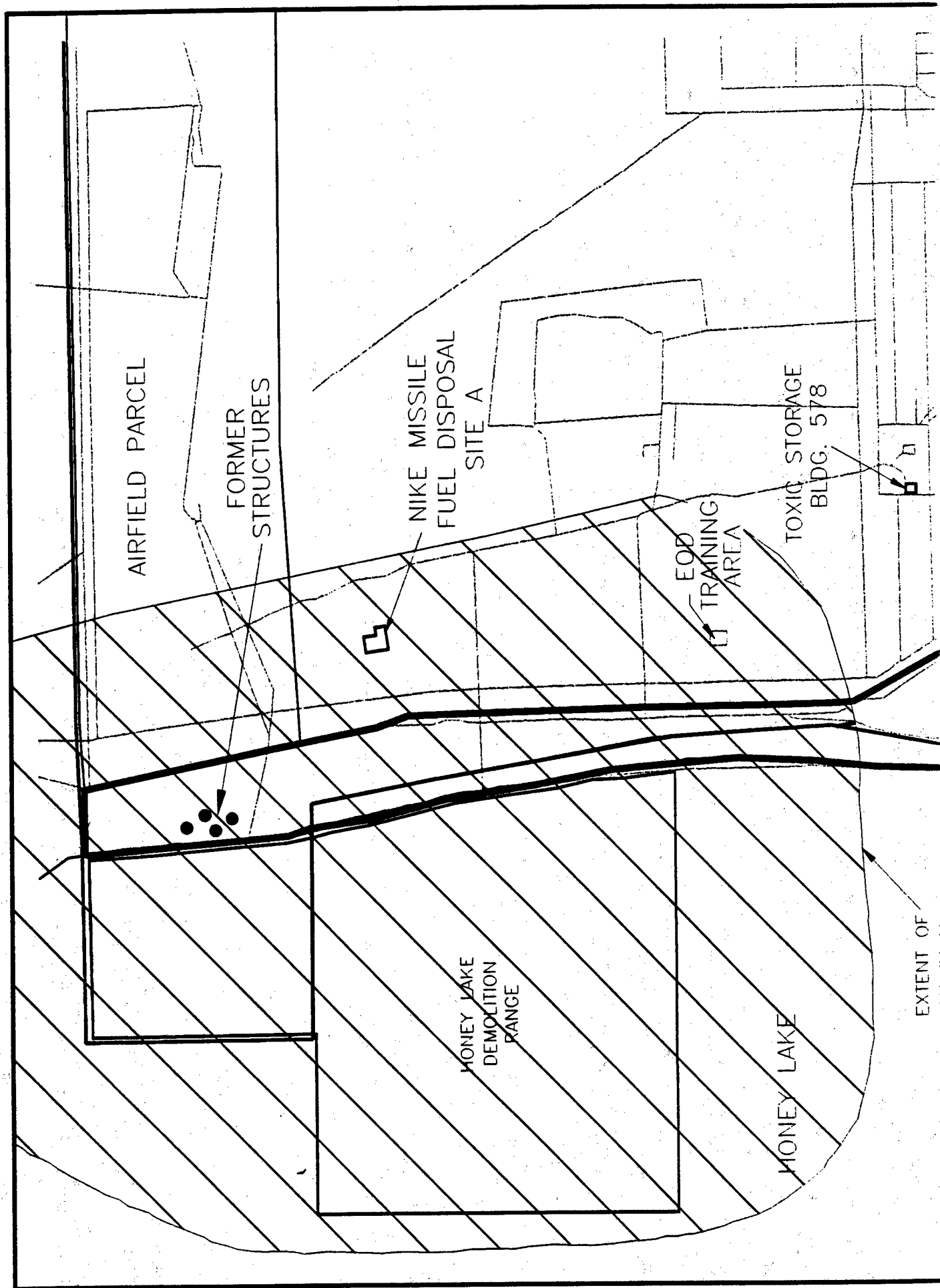
Tract 27
Estate of James L. Humphrey
D/T No. 1 (Civil Action 4441) 5/19/42

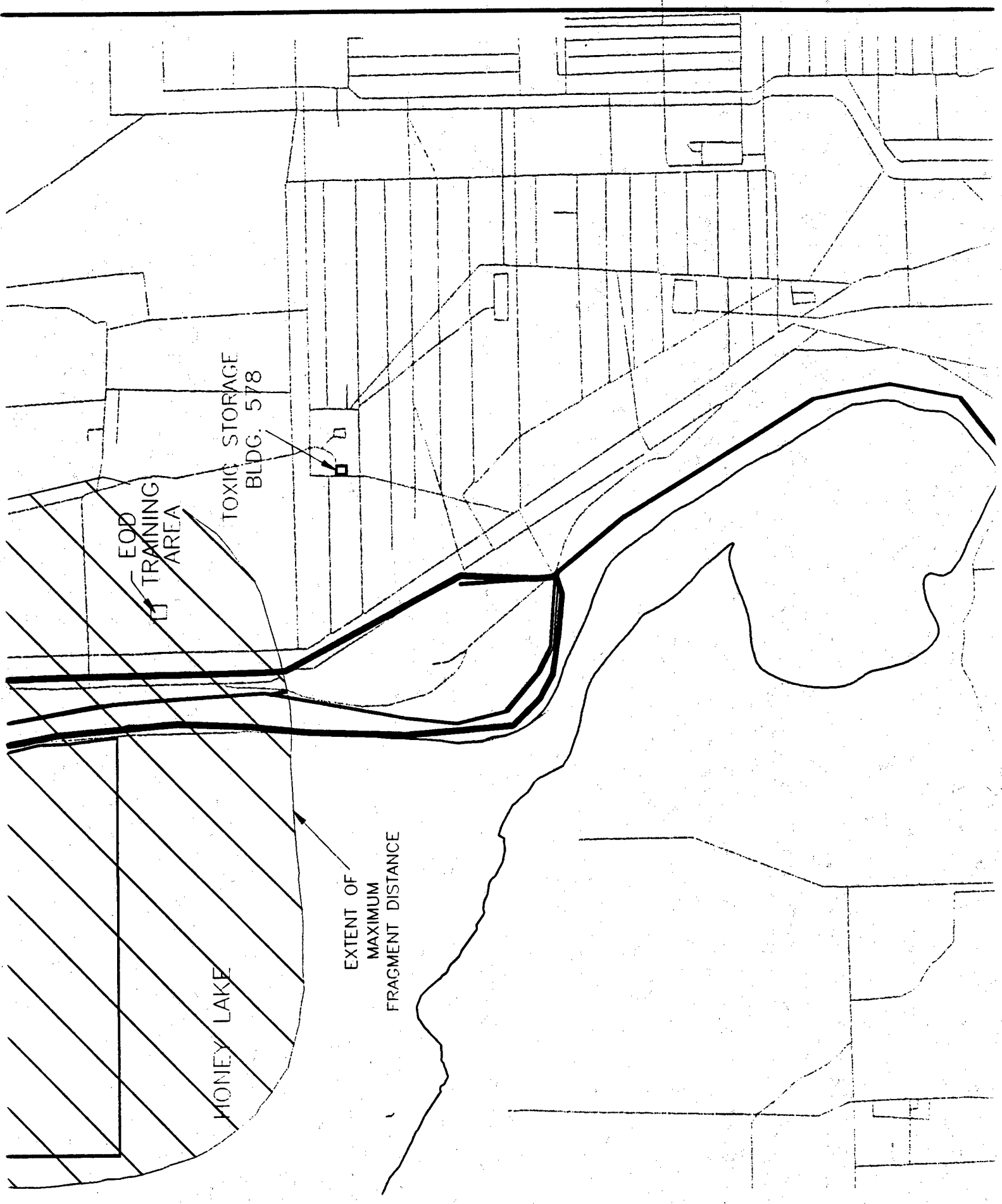
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Catherine Lally
D/T No. 2 (Civil Action 4441) 5/19/42

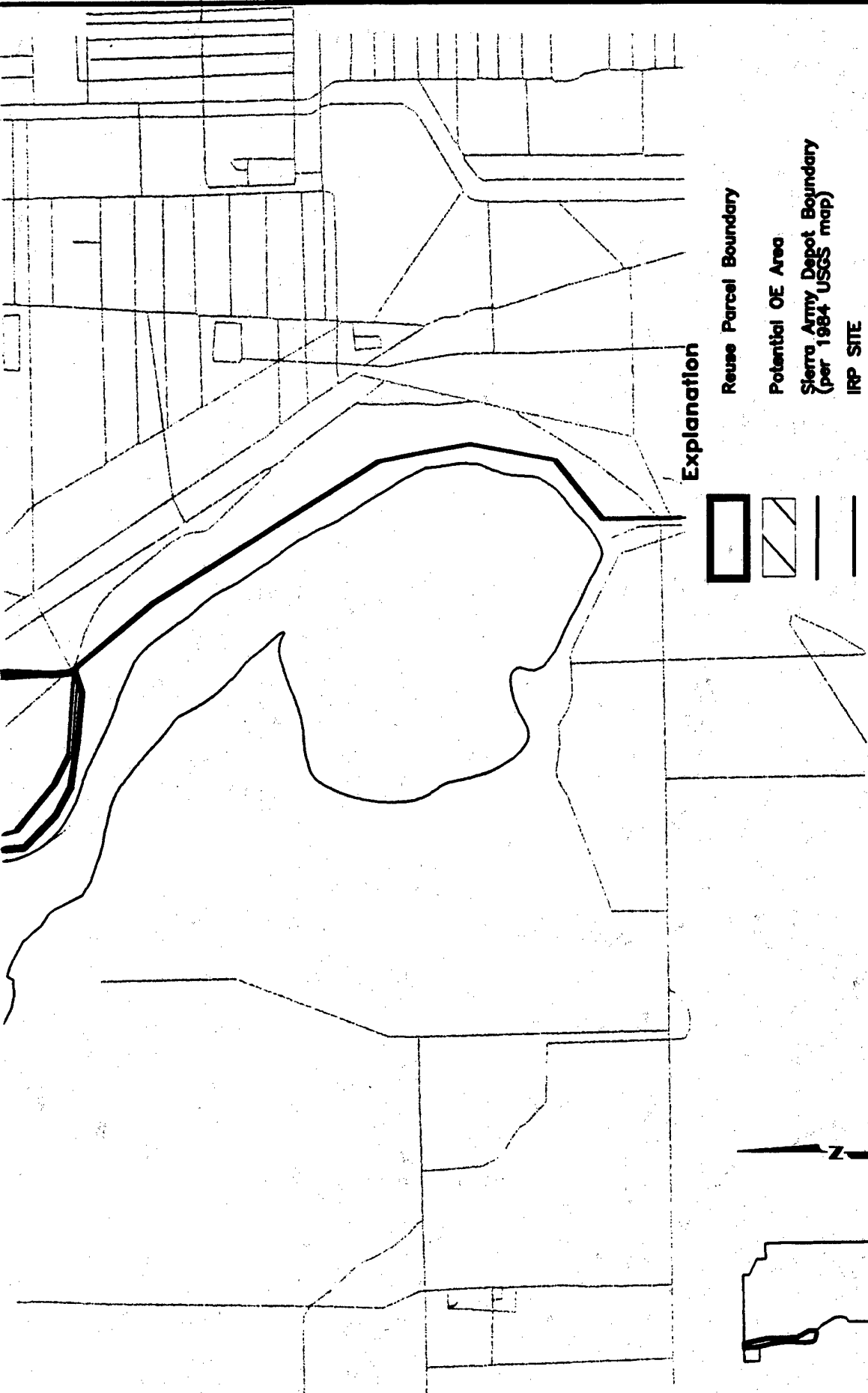
Tract D
Bureau of Land Management 1944

Tract 43
State of California
Purchased by Department of the Army 5/5/92

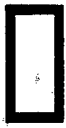


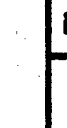
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Estate of James L. Humphrey
D/T No. 1 (Civil Action 4441) 5/19/42







Explanation

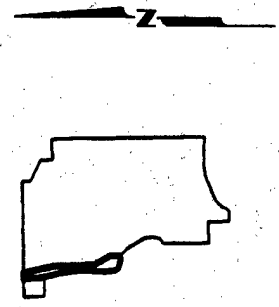
-  Reuse Parcel Boundary
-  Potential OE Area
-  Sierra Army Depot Boundary (per 1984 USGS map)
-  IRP SITE

Note: All Boundaries are Approximate

Figure B1

Location Map
Honey Lake East Shoreline Reuse Parcel

Prepared for:
U.S. Army Environmental Center
Aberdeen Proving Ground, Maryland
Sierra Army Depot, Lassen County, California



Honey Lake Demolition Range

Airfield

□ Nike Missile Fuel
Disposal Site A

East Shoreline

□ Toxic Storage
Building 578

①

Demolition Range



Airfield



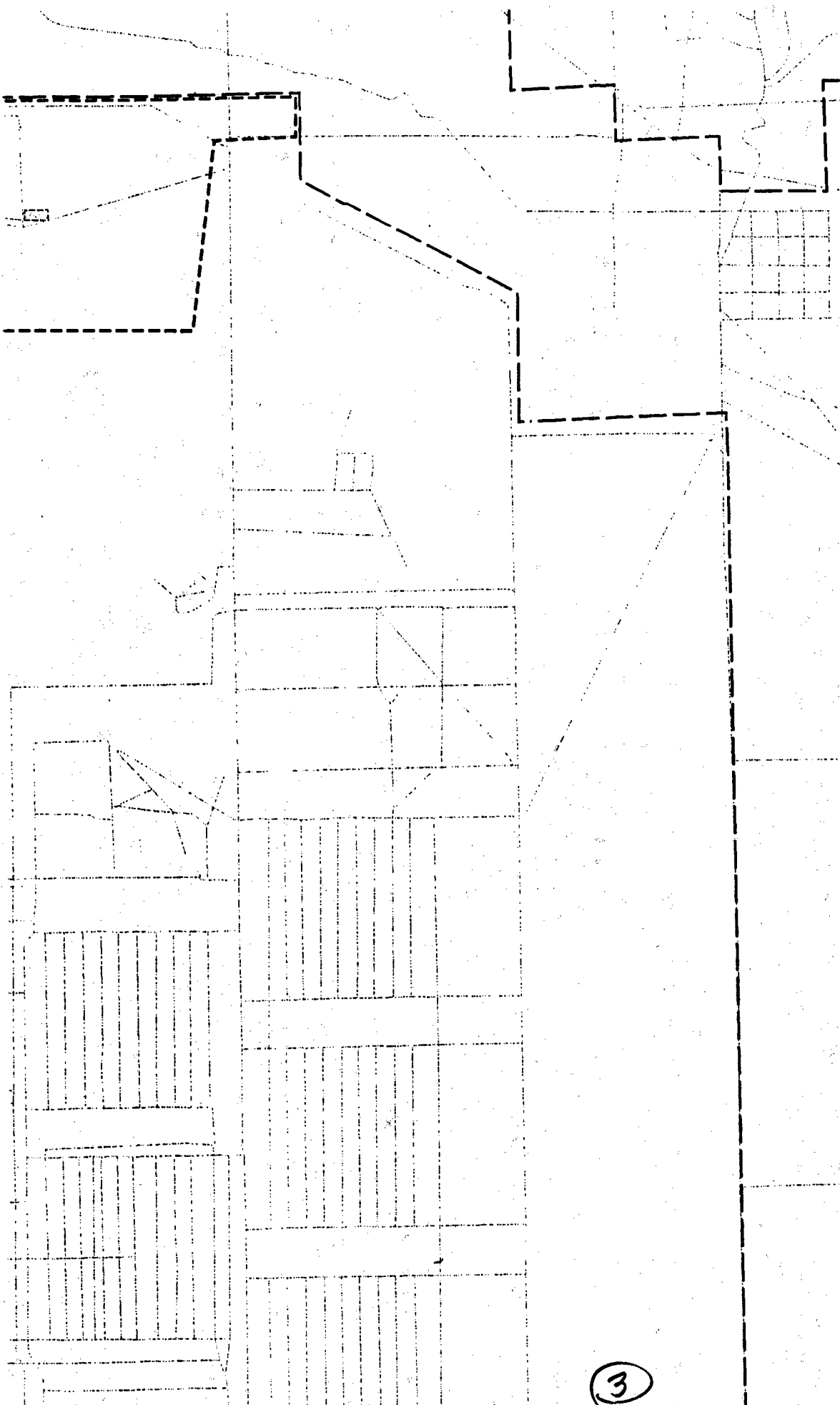
Nike Missile Fuel
Disposal Site A

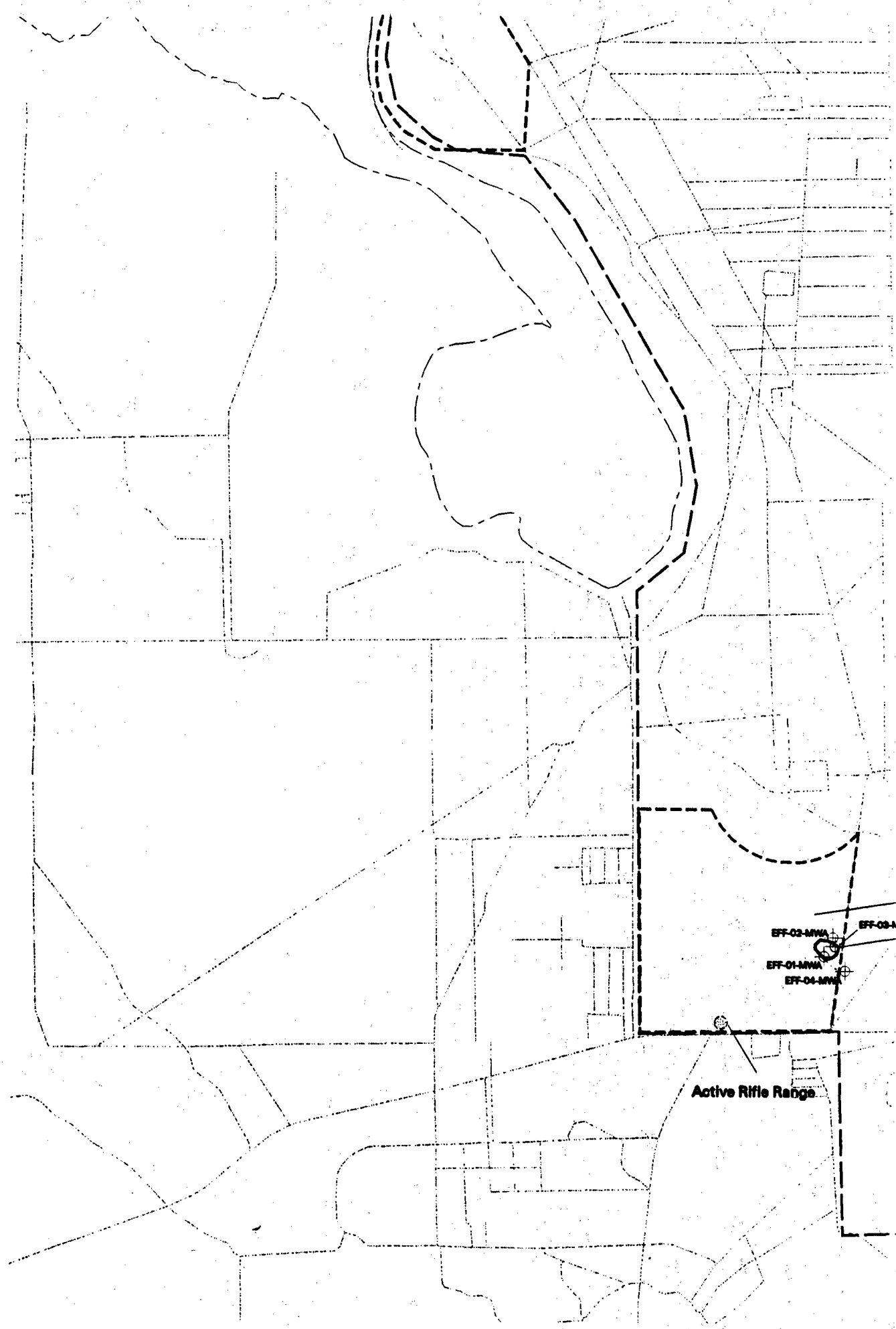
East Shoreline



Toxic Storage
Building 578

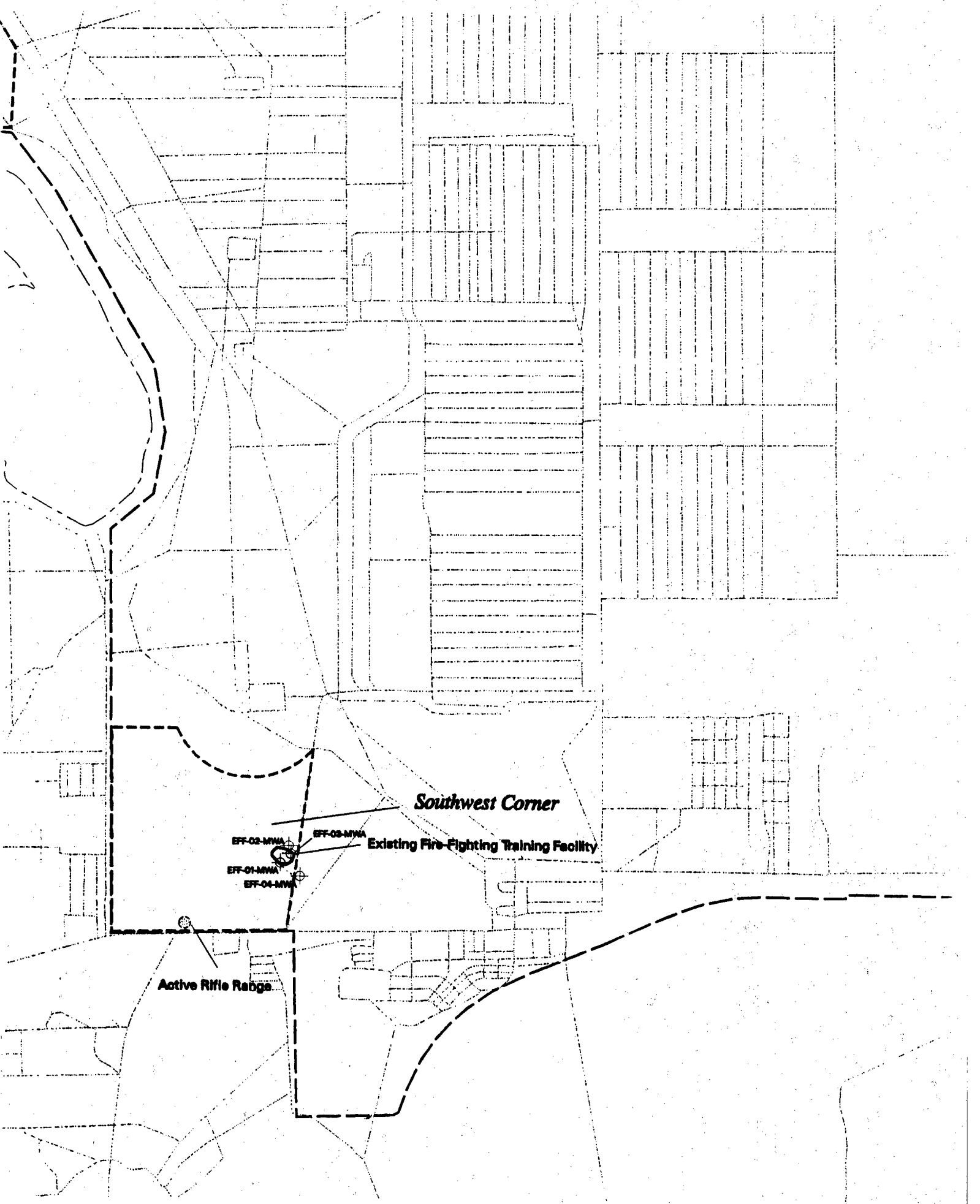
2





④

EXPLANATION

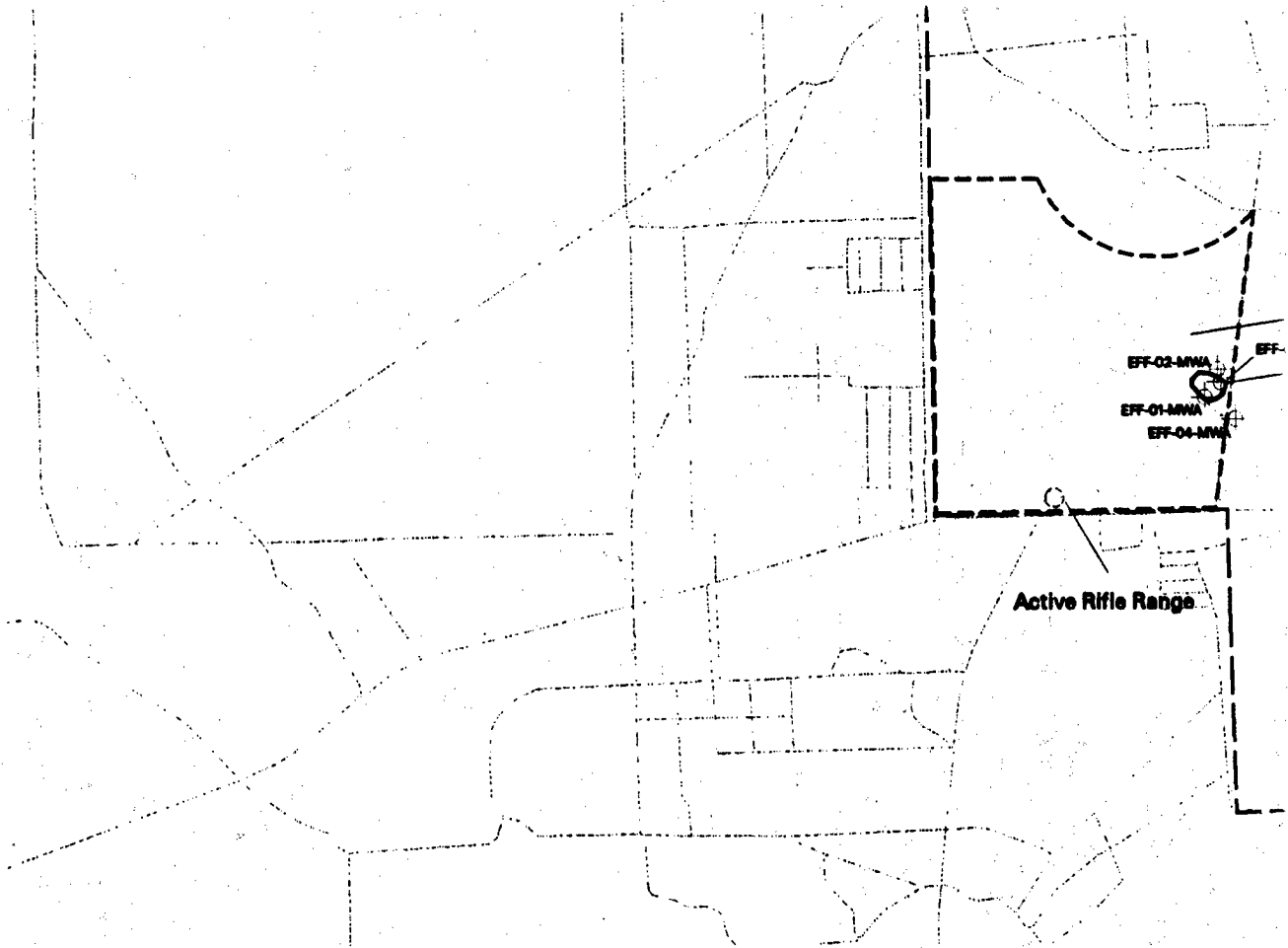


EXPLANATION

5










Fighting Training Facility

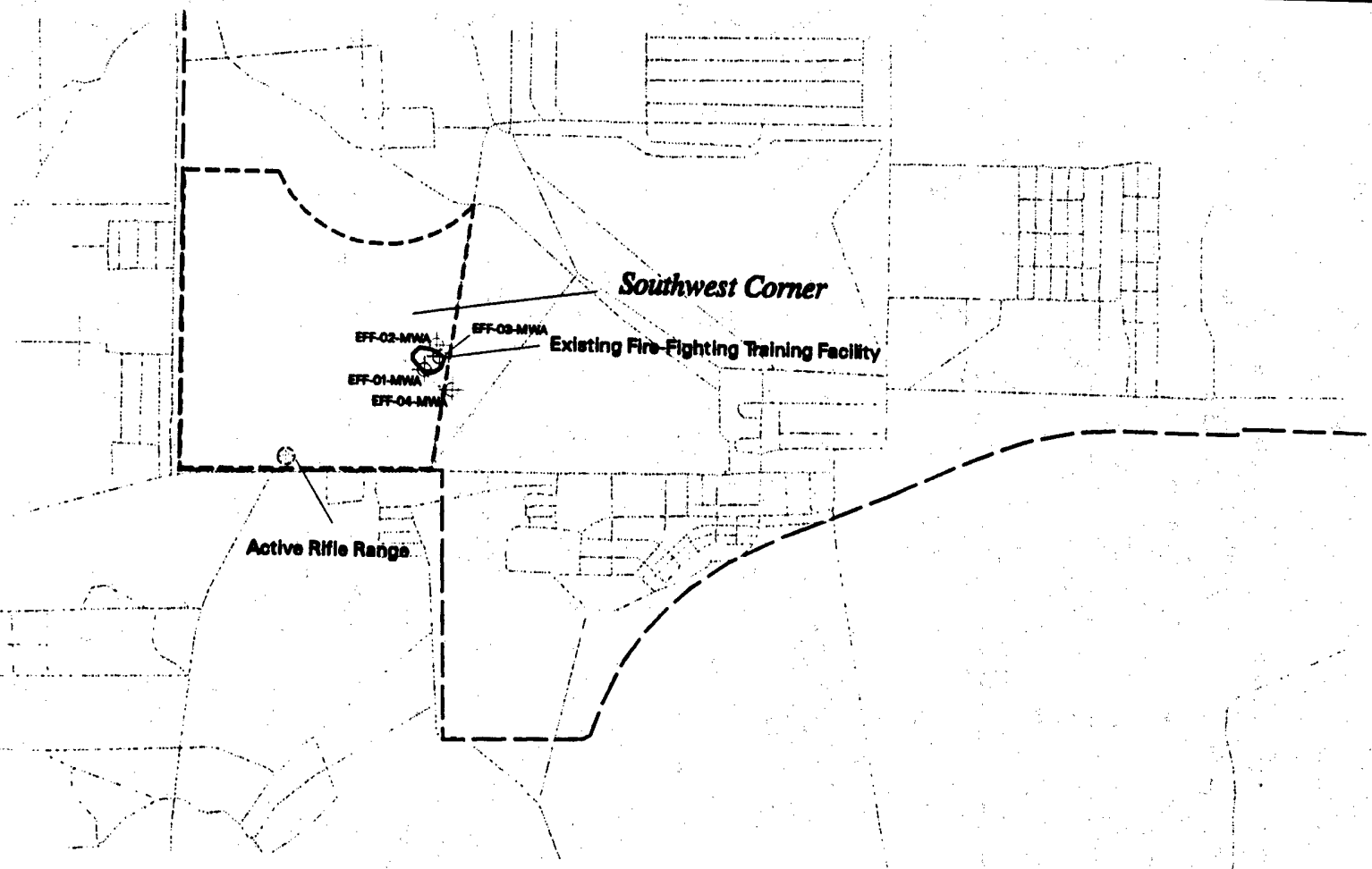


EXPLANATION

Department of Defense Environmental Condition (DoD, 1993)

-  Category 1: Areas where no storage, release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)
-  Category 2: Areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred)
-  Category 3: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require removal or remedial action
-  Category 4: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken
-  Category 5: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are under way, but all required remedial actions have not yet been taken
-  Category 6: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented
-  Category 7: Areas that are unevaluated or require additional evaluation

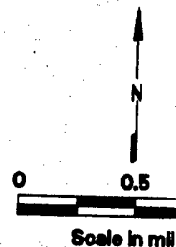
Note: Property boundaries indicated are approximate and are not intended to represent the legal description of the parcel(s).



EXPLANATION

s substances or petroleum
 rom adjacent areas)
 stroleum products has occurred
 red)
 of hazardous substances or
 require removal or remedial action
 of hazardous substances or
 to protect human health and the
 of hazardous substances or
 e under way, but all required remedial
 of hazardous substances or
 e not yet been implemented
 on
 represent the legal description of the parcel(s).

- Approximate Honey Lake Boundary
- Installation boundary per USGS topographic map
- Airfield, East Shoreline, and Southwest Corner BRAC parcel boundaries
- Roads
- IRP Site
- ⊕ Monitoring Well



Source: Parcel, shoreline, and property boundaries from SIAD Environmental Management Division



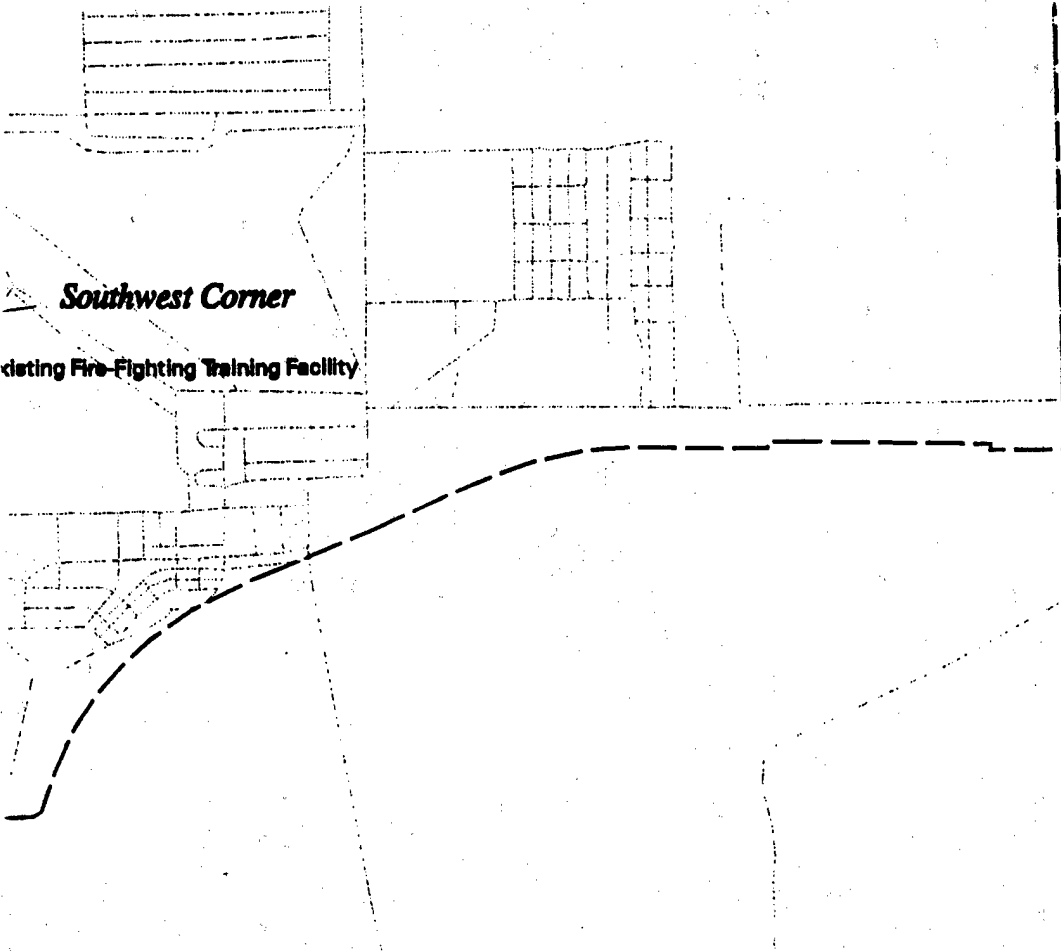
Harding Lawson Associates
Engineering and
Environmental Services

CERF
South
East
Sierra
Lasse

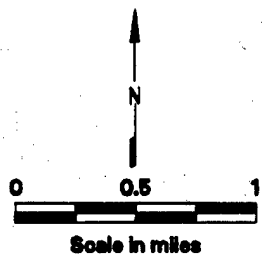
DRAWN
SAS

JOB NUMBER
32100 11.05.00

APP



- Approximate Honey Lake Boundary
- Installation boundary per USGS topographic map
- Airfield, East Shoreline, and Southwest Corner BRAC parcel boundaries
- Roads
- IRP Site
- Monitoring Well



Source: Parcel, shoreline, and property boundaries from SIAD Environmental Management Division



Harding Lawson Associates
Engineering and
Environmental Services

**CERFA Map of
South West Corner, Airfield, and
East Shoreline Parcels
Sierra Army Depot
Lassen County, California**

PLATE

B-1

DRAWN SAS	JOB NUMBER 32100 11.05.00	APPROVED	DATE 11/25/96	REVISED DATE 2/14/97
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9

ADDENDUM C

SOUTHWEST CORNER REUSE PARCEL EBS AND CERFA REPORT

C.1 INTRODUCTION

This addendum to the EBS and CERFA report presents the results of an assessment of known existing environmental conditions for the Southwest Corner Reuse Parcel located within the property boundaries of SIAD, Lassen County, California (Figure C.1). This addendum presents information developed subsequent to the submittal of the Draft EBS and CERFA Report prepared in April 1996 (HLA, 1996). The organization of this addendum follows that of the main body of the report and does not repeat background information or information describing the physical setting at SIAD. The focus of this addendum is the environmental conditions of the Southwest Corner Reuse Parcel as they pertain to property transfer. Information presented in this EBS, including information in this addendum, will be used by the Army to identify uncontaminated real property within the SIAD Reuse Parcels according to the requirements of CERFA and to support transfer of the property to non-Department of Defense (DoD) use. Categorization according to the seven DoD categories incorporates recent changes to CERCLA as part of the DoD Authorization Act for Fiscal Year 1997, as noted below.

Additional information regarding the purpose and objectives of this EBS is discussed in Section 1.0 of the main body of this report. General information about SIAD, including the present mission and operation of SIAD today; an overview of SIAD's physical setting, physiographic meteorology, surface water, geology, and hydrogeology are presented in Section 1.0 and 2.0 of the main body of the EBS. The remaining sections of this addendum present specific information for the Southwest Corner Reuse Parcel. The approach to conducting this EBS for the Southwest Corner Reuse Parcel is presented in Section C.3. The specific results of the EBS and Findings and Conclusions are contained in Sections C.4 and C.5, respectively. The CERFA report for the Southwest Corner Reuse Parcel is presented in Section C.6. References cited in this addendum are contained in Section C.7.

C.2 PARCEL DESCRIPTION AND ORAL HISTORY

This section presents relevant descriptive information about the Southwest Corner Reuse Parcel, previous and current activities on the parcels, and historical uses of adjacent parcels.

The Southwest Corner Reuse Parcel encompasses approximately 675 acres in the southwest corner of SIAD. The parcel consists of mostly undeveloped land, but includes a rifle range, an unpaved former auto racetrack, a burned wood area, and the Existing Firefighting Training Facility (EFFTF) IRP Site (including monitoring wells). A monitoring well that is associated with the existing landfill, located approximately 0.5 mile to the north of the parcel boundary is also present on the parcel.

The rifle range was originally constructed in 1954. The rifle range is reportedly currently active and was historically used to fire M-1 and M-16 rifles (*Colberg, 1996*). The former auto racetrack was constructed in 1954 and demolished in 1965. The Burned Wood Area includes areas where wood-debris was burned; metal debris is common in the immediately vicinity of this area. The area may have been active as early as 1981; burning was known to have been conducted from 1984 to 1987 based on the Preliminary Assessment Review (*EPA, 1992*). The EFFTF area was used to train SIAD fire control personnel and was in operation from 1968 to mid-1987. Once or twice per year, about 400 gallons of diesel fuel were burned onsite during training sessions (*MW, 1993*).

There are currently no buildings on the parcel with the exception of a small plywood storage building located next to the rifle range. The building is two to three years old, has no utilities or plumbing, and appears to be used as a sheltered enclosure at the rifle range. Former structures at the range included a wooden judges stand and grandstands associated with the former auto racetrack (*Gordon, 1996*). The judge's stand, built in 1955, was approximately 12 by 17 feet in size, constructed of wood with asbestos-cement siding, and was demolished onsite in 1963. The grandstands were constructed in 1954 and demolished in 1965. The materials used to construct the grandstand were not identified in SIAD files.

The Southwest Corner Reuse Parcel was former State of California land (undeveloped) prior to the DoD taking of the property in 1992 (*Gordon, 1996*).

The area surrounding the Southwest Corner Reuse Parcel consists mostly of undeveloped property. The parcel is roughly bordered by undeveloped land to the west, the SIAD boundary and Susanville Road to the south, the truck holding yard and Existing Landfill to the north, and undeveloped land areas to the east. The holding yard is used as a storage area for trucks carrying suspect explosives; trucks are escorted to this area from the main SIAD entrance upon identification of "suspect" status. The circular portion of the northern parcel boundary represents a detonation safety zone. The holding yard site is still active and no accidents have been recorded.

C.3 APPROACH TO CONDUCTING ENVIRONMENTAL BASELINE SURVEYS

This section briefly describes the activities performed for the Southwest Corner Reuse Parcel EBS. This addendum considers currently available information from various sources including a records search, interviews with SIAD personnel, visual inspections, and evaluations of the potential for adverse impacts from other parcels near the Southwest Corner Reuse Parcel. Results of these investigations are in Section C.4 of this addendum.

Records Search

Records reviewed included the COE-RI report entitled *Ordnance and Explosives, Archive Search Report, Conclusions and Recommendations for the Honey Lake Range* dated September 1996, regarding OE issues at the parcel; Environmental Science Associates, Inc. (ESA) report entitled *Underground Storage Tank, Risk Assessment Report, Sierra Army Depot, Herlong, California* dated July 11, 1990 regarding the presence of a former UST; the *Preliminary Assessment Review* prepared by the EPA dated September 30, 1992, regarding hazardous waste and IRP Sites; International Technology Corporation's (IT) *Asbestos Abatement Survey at Sierra Army Depot, Herlong, CA* dated June 24, 1988 related to asbestos surveys; and available aerial photographs depicting pertinent historical information.

Interviews

The following SIAD personnel were interviewed regarding various pertinent environmental and historical issues in support of this addendum:

- Mr. John Colberg- ACM, LBP, Radon, PCBs
- Mr. Dave Holsey - Petroleum Storage Tanks
- Mr. Andy Riess - OE
- Ms. Susan Getty - SWMUs
- Ms. Carol Gordon - Prior use, parcel history, building information and construction dates
- Mr. Mike Chastain - Radiological issues

Visual Inspection

HLA personnel performed a site visit during September 1996 to examine the area and review the general condition of buildings or other facilities. Mr. John Colberg of SIAD accompanied HLA on the site visit. Figure C.1 shows the location of the Southwest Corner parcel, which consists of mostly undeveloped land with a rifle range, unpaved former auto racetrack, burned wood area, EFFTf area, and a monitoring well associated with the Existing Landfill. The location of these features are shown on Figure C.1. The rifle range, which was originally constructed in 1954, is approximately 50 yards wide, bermed on three sides, and was observed to be well maintained at the time of the site visit. No visible evidence of spent bullets or casings were observed on the ground. An unpainted, small wood shelter is present onsite next to the rifle range. The building was empty at the time of the site visit and did not appear to contain any utilities or electrical power.

The unpaved former auto racetrack currently appears as a dirt oval that is mostly void of vegetation. The Burned Wood areas are located on the west side of the former auto racetrack. Wood, rusted empty 1-gallon and 5-gallon containers, used paint rollers, asphalt roofing shingles, and other miscellaneous debris were observed during the site visit. The EFFTf area presently consists of a cement pad, a bioventing unit, and several monitoring wells.

The remaining portions of the Southwest Corner are undeveloped, of low relief, and consist of sagebrush, rabbitbrush, and other native low-growing shrubs and plants. No other structures other than those noted above are on the parcel.

No stressed vegetation or odors were noted during the site visits in September or October 1996. The results of the visual inspections for specific environmental issues are reported in appropriate portions of Section C.4.

Sampling

No sampling was performed in support of the EBS. A number of sampling activities, including those associated with the EFFTf area have been completed or are ongoing and were used in support of the EBS. For a discussion regarding the evaluation of the EFFTf and adjoining properties, please refer to Section C.4.

Department of Defense Environmental Conditions of Property

The seven property classifications defined by the DoD BRAC Cleanup Plan (BCP) Guidebook (Fall 1993) were adopted for this report, including this addendum, as discussed in Section 4.0 of the main body of this report. However, categorization of property consistent with the requirements of CERCLA Section 120 (h)(4), considered certain recent revisions to CERCLA that were included in the Department of Defense Authorization Act for Fiscal Year 1997. These changes included a clarification of the meaning of uncontaminated property, resulting in DoD Condition of Property Categories 1 and 2 now being eligible for transfer under CERCLA Section 120(h)(4). A discussion of the CERFA classifications for the Southwest Corner Reuse Parcel is included in Section C.6.

C.4 RESULTS OF EBS FOR SOUTHWEST CORNER REUSE PARCEL

The results of the EBS for the Southwest Corner parcel, including a discussion of potential impacts from adjoining properties, are presented below. The main body of the report (Section 4.0) presents a general summary of SIAD's program for each of the environmental issues discussed below.

Asbestos

Because the only structure on the parcel is the plywood shelter at the rifle range, no asbestos tests were performed for the Southwest Corner Parcel (*Colberg, 1996*). Former structures on the parcel were demolished between 1963 and 1965.

Lead Based Paint

No LBP tests were performed for the Southwest Corner Parcel (*Colberg, 1996*).

Radon

No testing has been performed on the parcel, however, no buildings on the SIAD installation had radon test results above 4 pCi/L (*Vail, 1991*).

Radiological Survey

According to Mr. Mike Chastain, Chief of the Radiation Protection Division of SIAD, no radiological surveys have been conducted at the Southwest Corner parcel. Site activities do not indicate the use of radiological materials at this parcel (*Chastain, 1996*).

Ordnance and Explosives

There are no known potential OE locations identified within the property boundaries of the Southwest Corner Parcel (*Riess, 1996*) other than lead bullets in the Rifle Range.

Polychlorinated Biphenyl's

No known transformers are located on the Southwest Corner Parcel (*Colberg, 1996*).

Petroleum Storage Tanks

No known USTs exist on the Southwest Corner Parcel. A former 500 gallon AST was used at the EFFTf to supply fuel for the training sessions (*MW, 1993*). A ROD for remediation of the EFFTf was signed in 1993 and cleanup of the contaminated soil by bioventing was initiated in 1994 and is currently ongoing.

Solid and Hazardous Waste Management Units

No SWMUs are located on the Southwest Corner Parcel. The nearest SWMU is the Existing Landfill, which is located approximately 0.5 miles north of the parcel, as shown on Figure C.1.

Installation Restoration Sites

The EFFTf is located on this parcel. The ROD for this site was signed in 1993, and addresses diesel contaminated soils. Groundwater was not identified as having been adversely impacted by Army operations at this site during the Remedial Investigation (*MW, 1993*). Cleanup of the contaminated soil by bioventing was initiated in 1994 and is currently ongoing. The Army has not received concurrence from the State regulatory agency that the bioventing system is operating properly and successfully,

which is required prior to transfer. However, it is anticipated that completion of the bioventing program and issue of the site closure report will be performed by December 1997.

Potential Impacts From Adjoining Properties

The Existing Landfill is located approximately 0.5 miles north of the Southwest Corner Parcel. The landfill is permitted for disposal of domestic waste and construction debris. Groundwater monitoring is ongoing including nineteen monitoring wells that have been installed in the vicinity of the landfill. Detectable levels of TCE ranging from 1.4 to 2.6 $\mu\text{g/l}$ have been reported in one of the wells near the landfill. Arsenic and vanadium were detected in groundwater and determined to be from natural hydrogeologic and climatic conditions. The Truck Holding Yard is an active site located just north of the northern boundary of the Southwest Corner Parcel. The site is used to temporarily hold ordnance trucks that are suspected of being tampered with or which may have other suspect conditions, until cleared to safely proceed. Trucks carrying suspect explosives are escorted to this area by SIAD Security and are routinely held for one or two days before being allowed to proceed. No accidents have been reported to date at the Truck Holding Yard.

C.5 FINDINGS AND CONCLUSIONS

This section presents an overview of existing environmental conditions on the Southwest Corner Reuse Parcel based on available information. Available information concerning the environmental conditions on the Southwest Corner Reuse Parcel has been gathered and summarized in this addendum. Findings of the EBS for the Southwest Corner Reuse Parcel include:

- The parcel boundaries used in this study and shown in this report are approximate and are identified on the basis of information provided from SIAD. Because the only structure on the parcel is a plywood shelter at the Rifle Range, no asbestos tests were performed at the Rifle Range
- No testing has been performed on the parcel, however, no buildings on the SIAD installation had radon test results above 4 pCi/L (*Vail, 1991*).
- No LBP tests have been conducted on the parcel.
- No OE surveys have been conducted for the parcel.
- No electrical transformers currently exist, nor did ever exist, on the parcel.
- No USTs/ASTs currently exist on the parcel.
- Remediation of petroleum hydrocarbons at the EFFTf is underway. A ROD was signed for remediation of the site in 1993. Remedial action was initiated in 1994 and is ongoing.
- SWMUs were not identified within the Southwest Corner Reuse Parcel.
- The EFFTf is the only IRP site within the parcel. The Burned Wood area is in the immediate vicinity of the EFFTf and requires additional characterization.
- One groundwater monitoring well associated with the Existing Landfill is present on the Southwest Corner Reuse Parcel. In addition, several groundwater monitoring wells are located at the EFFTf.
- None of the identified environmental conditions on adjoining properties are reported to affect environmental conditions within the Southwest Corner Reuse Parcel for the purposes of property transfer.

Available information regarding the environmental conditions on the Southwest Corner Reuse Parcel has been assembled and reviewed as it pertains to transferability of the property under the requirements of CERCLA § 120(h)(3) or (4) or based on Army or DoD policy regarding other safety concerns. Based on the findings of this EBS presented in the previous section, the following conclusions are made:

- Petroleum hydrocarbons were released to the environment as part of past activities at the EFFTf. Remediation of the site has been underway since 1994 as part of a ROD signed in 1993.
- No other storage of hazardous substances and petroleum hydrocarbons on the Southwest Corner Parcel has occurred.
- There are no known environmental conditions on properties adjacent to the Southwest Corner Parcel that are expected to have an impact on the respective parcels now or in the immediate future.
- Information compiled in this EBS are discussed in the following section, Section C.6, CERFA, and are interpreted and categorized according to the DoD Categories 1 through 7.

C.6 COMMUNITY ENVIRONMENTAL RESPONSE FACILITATION ACT (CERFA) REPORT

This section presents the DoD Category(s) for the Southwest Corner Reuse Parcel. Section 6.0 of the main report discusses the CERFA program, including the general purpose of CERFA legislation, and the effect of the legislation on real property transfer. The findings of the SIAD CERFA investigation for this parcel follows:

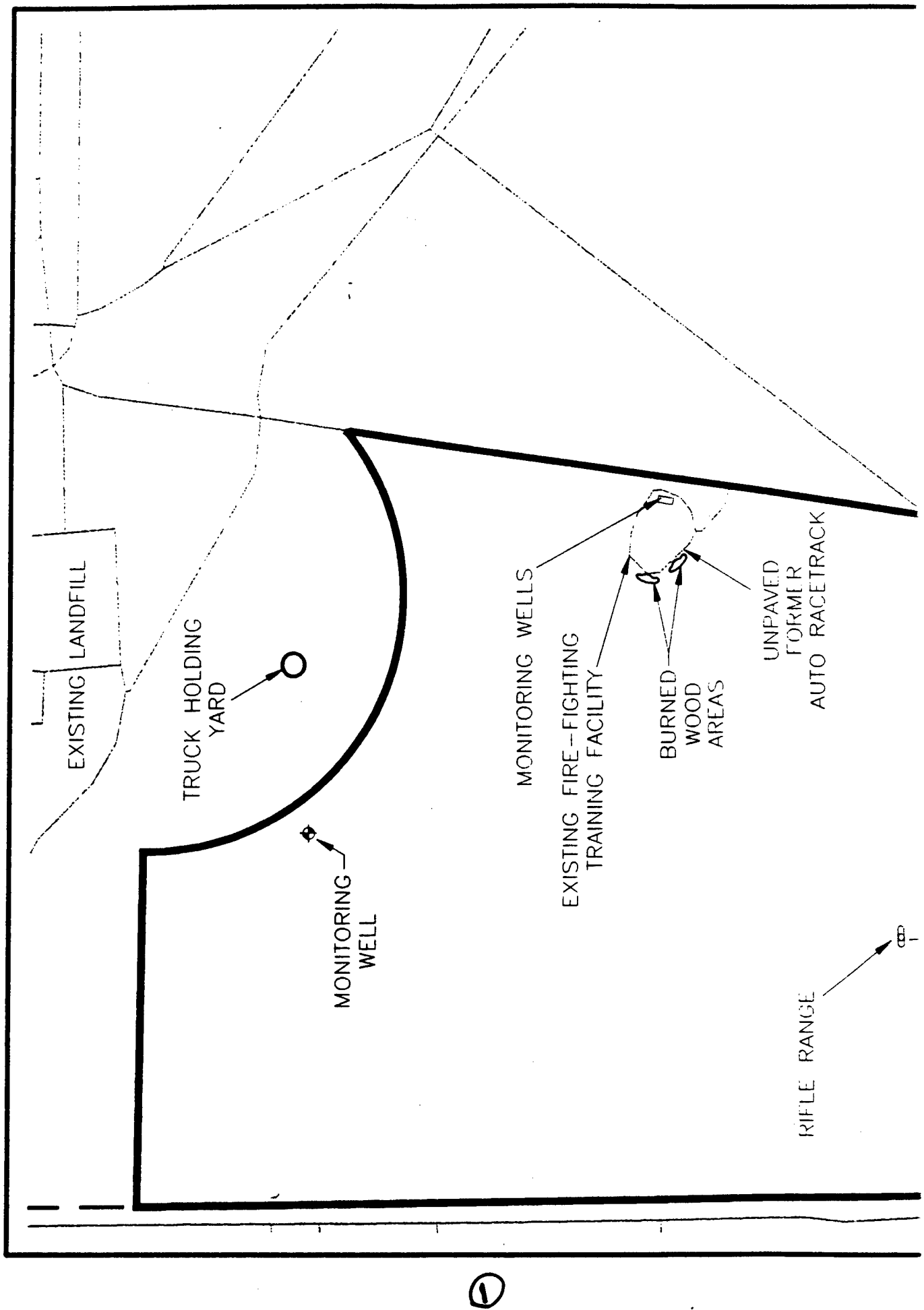
The environmental issues of concern identified for the Southwest Corner Reuse Parcel were evaluated to classify subareas of each parcel according to DoD Categories 1 through 7, as discussed in Section 3.7. As shown on Figure C-1, and considering available information, most of the Southwest Corner Reuse Parcel is DoD Category 1, uncontaminated. The area surrounding the EFFTf is categorized as DoD Category 5, Response Action Taken but not Completed. In addition, the area in the immediate vicinity of the Rifle Range is categorized as DoD Category 7, due to the known presence of bullets.

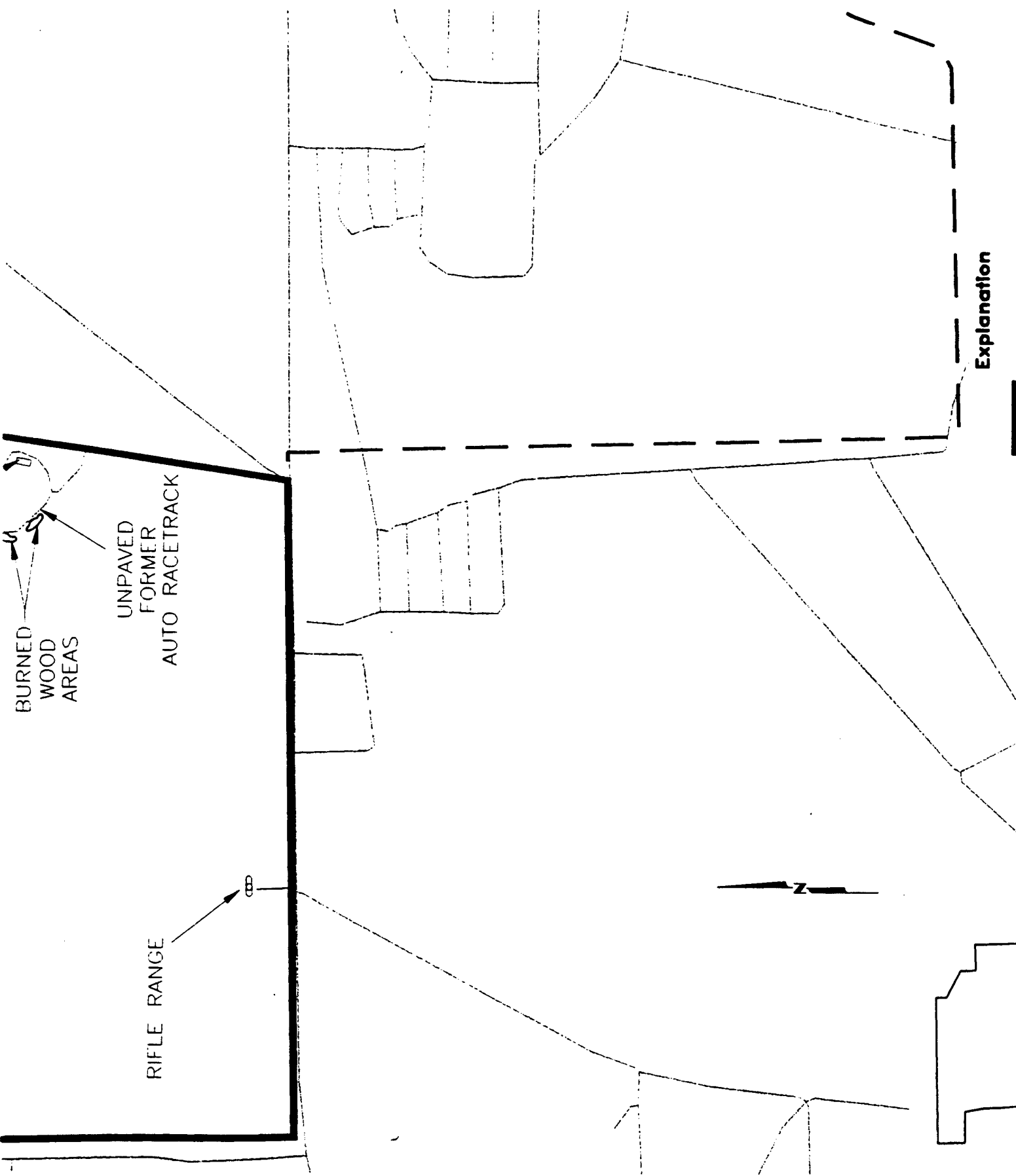
C.7 REFERENCES

- Chastain, Mike, 1996. Sierra Army Depot, Environmental Management Division. Personal communication with Ashley Valentine, Harding Lawson Associates. September 19.
- Colberg, John, 1996. PCB, LBP, Asbestos, and Radon Program Manager, Sierra Army Depot Environmental Management Department. Personal communication with Ashley Valentine, Harding Lawson Associates. September, October, and November.
- Environmental Science Associates, Inc. (ESA), 1990. *Underground Storage Tank, Risk Assessment Report, Sierra Army Depot, Herlong, California*. July 11.
- Getty, Susan, 1996. RCRA, Landfill Program Manager, Sierra Army Depot Environmental Management Department. Personal communication with Ashley Valentine, Harding Lawson Associates. September 1996.
- Gordon, Carol, 1996. Sierra Army Depot, Real Property Specialist. Personal communication with Ashley P. Valentine and Stephen M. Farley. Harding Lawson Associates. September and October.
- Harding Lawson Associates (HLA), 1994. Final Remedial Investigation for the Group III B Sites, Sierra Army Depot.
- Harding Lawson Associates (HLA), 1996. *Draft Environmental Baseline Survey, CERFA Report, Herlong and Honey Lake Reuse Parcels, Sierra Army Depot, Lassen County, California*. April.
- Holsey, Dave, 1996. UST Program Manager, Sierra Army Depot Environmental Management Department. Personal communication with Ashley Valentine, Harding Lawson Associates. October.
- International Technology Corporation (IT), 1988. *Asbestos Abatement Survey at Sierra Army Depot, Herlong, California*. June 24.
- Riess, A.G., 1996. Director of Public Works, Sierra Army Depot. Personal Communication with Ashley Valentine, Harding Lawson Associates. September, October, and November.
- U.S. Army Corps of Engineers, Rock Island District (COE-RI), 1996. *Ordinance and Explosives, Archives Search Report. Findings, Conclusions, and Recommendations for the Honey Lake Range*. September.
- U.S. Environmental Protection Agency (EPA), 1992. *Preliminary Assessment Review*. September 30.
- Weis, Robert, 1996. BRAC Environmental Corrdinator, Sierra Army Depot. Personal communication with Harding Lawson Associates; September, October, and November.

Table C1
Summary of Previous Landowners
Environmental Baseline Survey
Southwest Corner Reuse Parcel

Tract 60
State of California
Purchased by Department of the Army 5/5/92



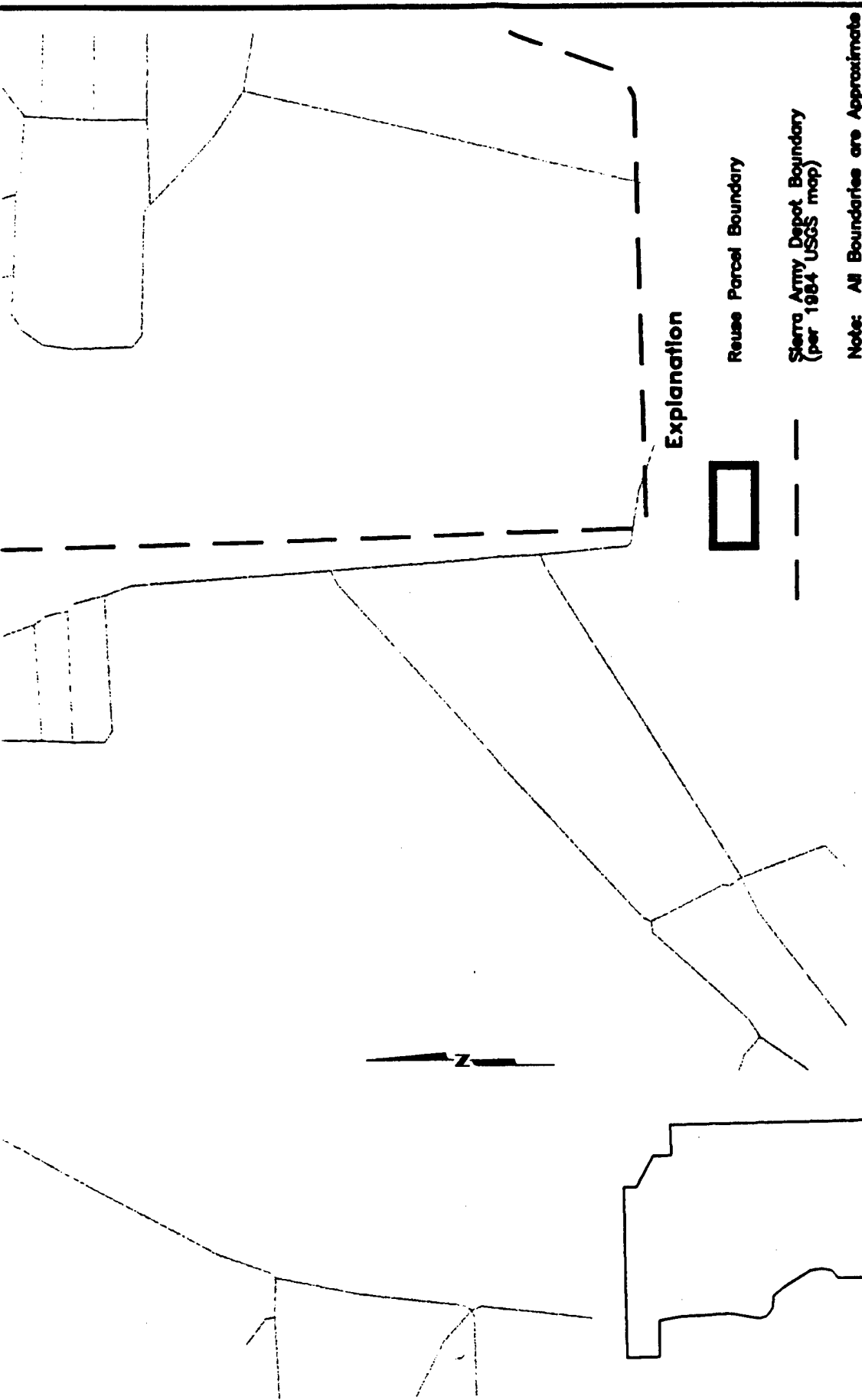


Explanation



UNPAVED
FORMER
AUTO RACETRACK

RIFLE RANGE

BURNED
WOOD
AREAS



Explanation

-  Reuse Parcel Boundary
-  Sierra Army Depot Boundary (per 1984 USGS map)

Note: All Boundaries are Approximate

<p>Figure C1</p>	<p>Prepared for: U.S. Army Environmental Center Aberdeen Proving Ground, Maryland</p>
<p>Location Map</p>	<p>Southwest Corner Reuse Parcel</p>
	<p>Sierra Army Depot, Lassen County, California</p>

Honey Lake Demolition Range

Airfield

☐ Nike Missile Fuel
Disposal Site A

East Shoreline

☐ Toxic Storage
Building 578

①

ge

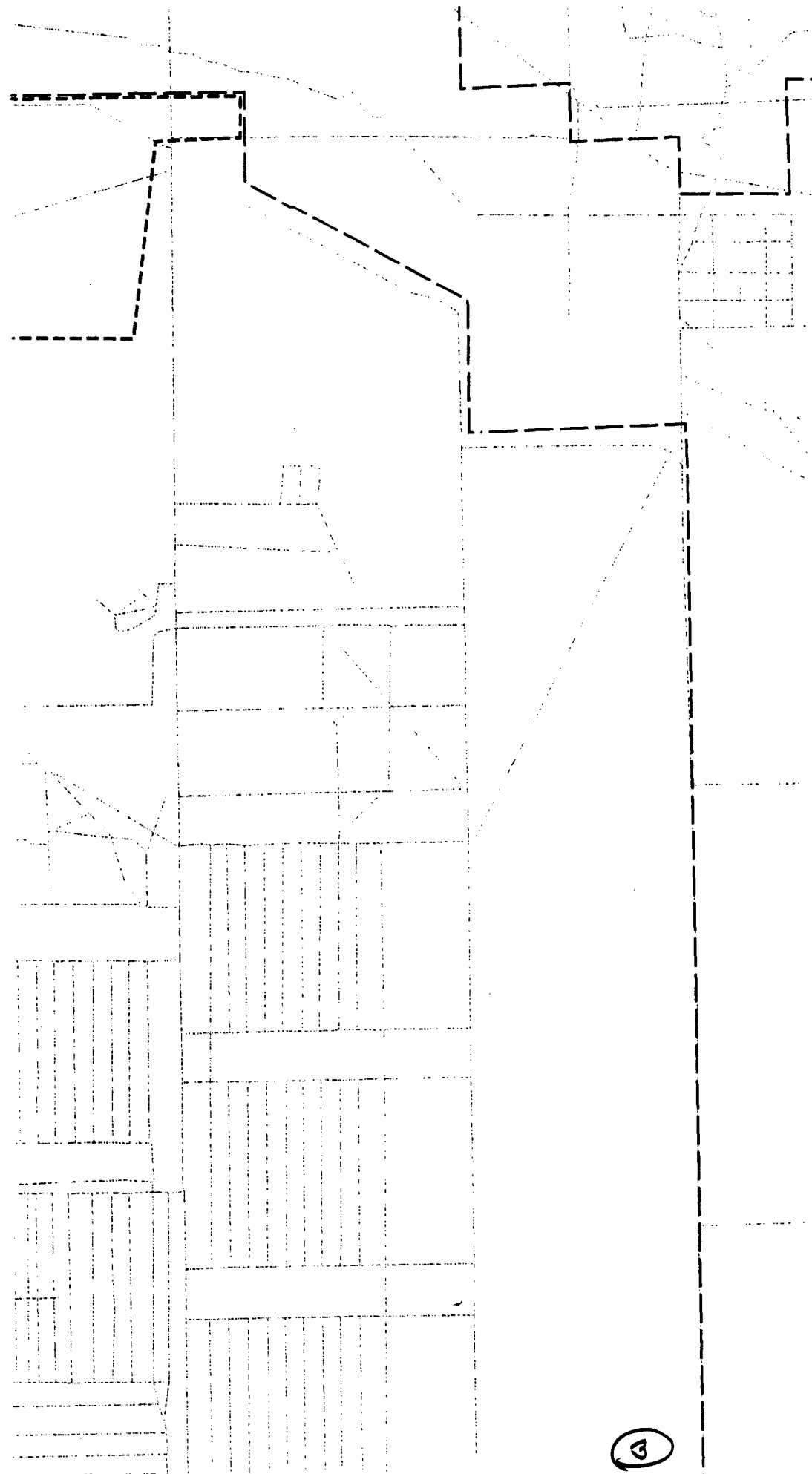
Airfield

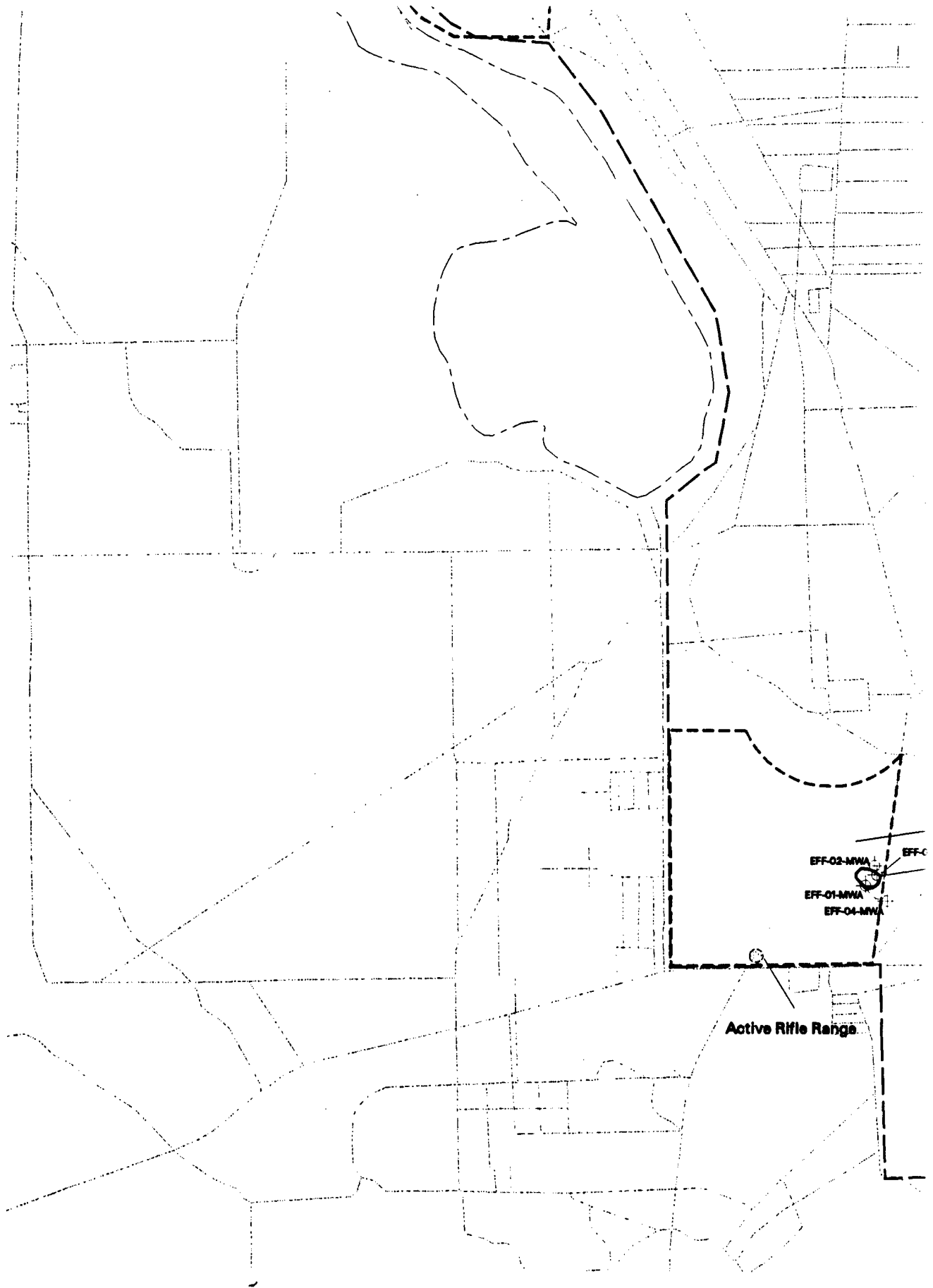
**ile Fuel
Site A**

Shoreline

☐ **Toxic Storage
Building 578**



②

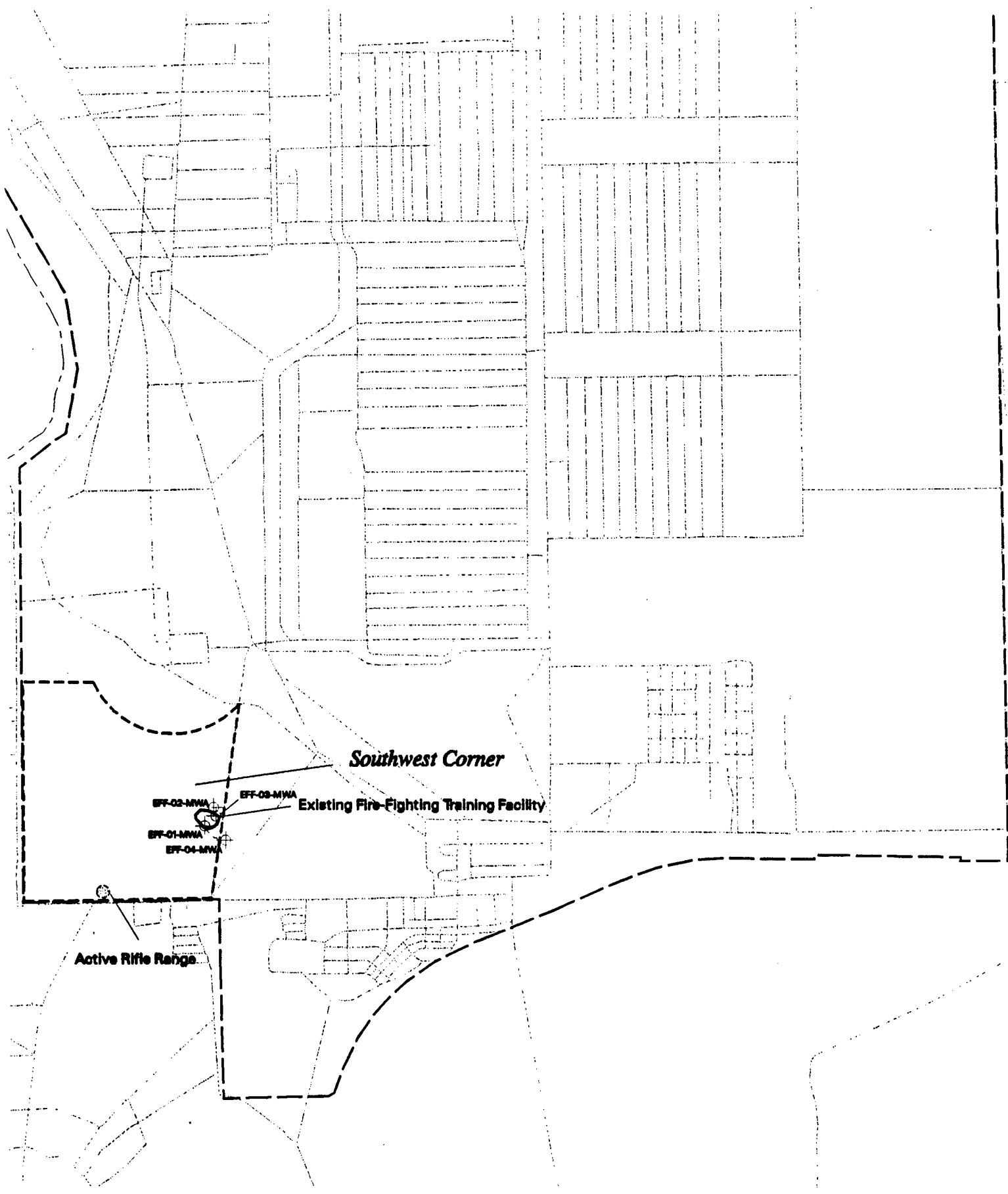




EXPLANATION

Department of Defense Environmental Condition (DoD, 1993)

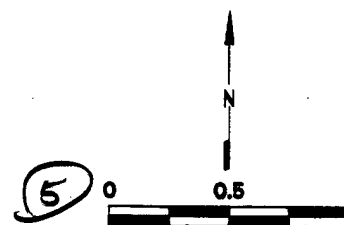
-  Category 1: Areas where no storage, release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)
-  Category 2: Areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred)

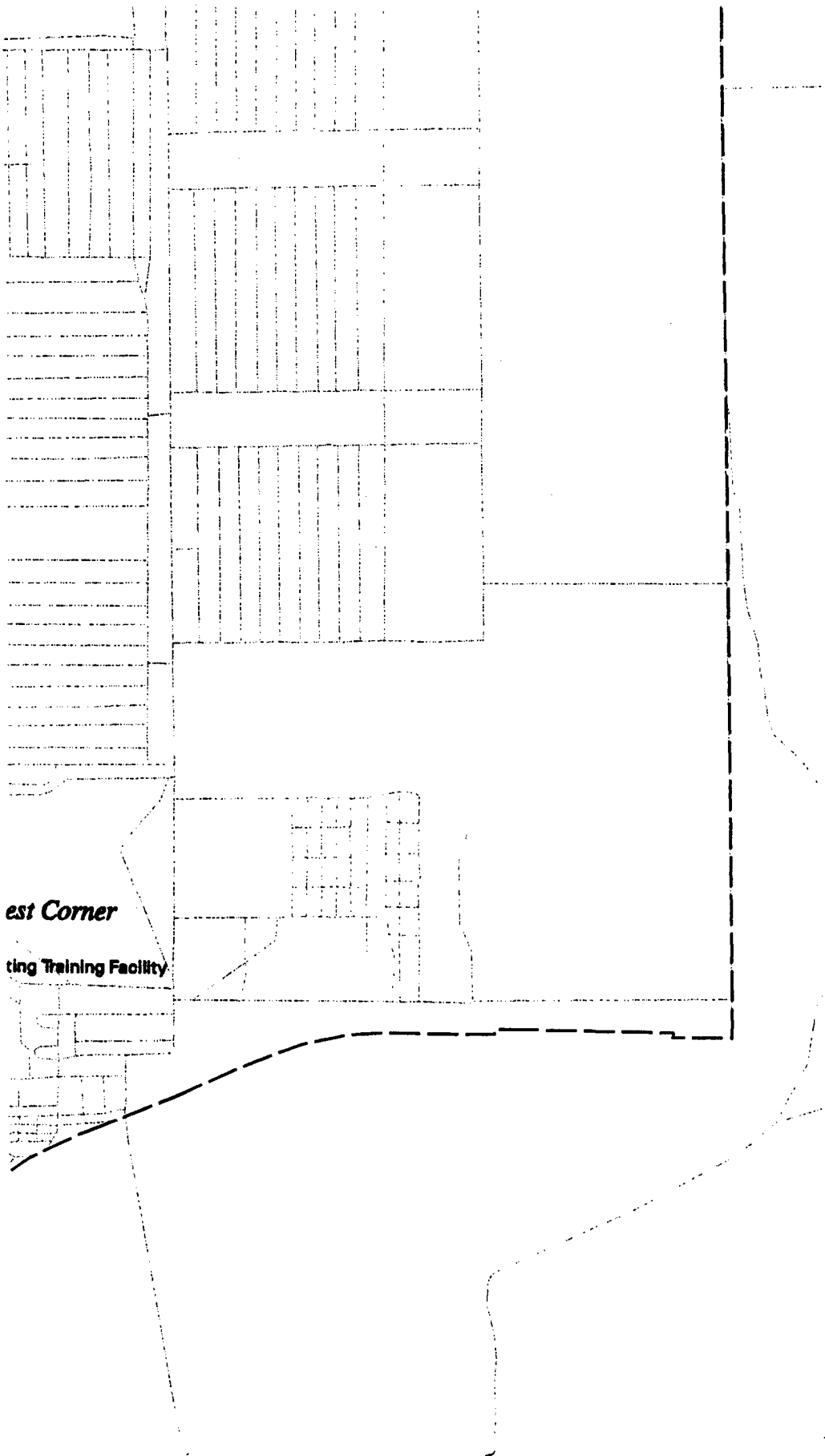


EXPLANATION

petroleum
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cts has occurred

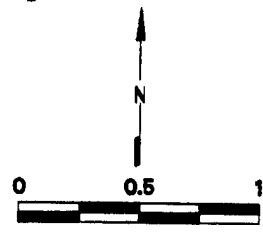
- Approximate Honey Lake Boundary
- Installation boundary per USGS topographic map
- Airfield, East Shoreline, and



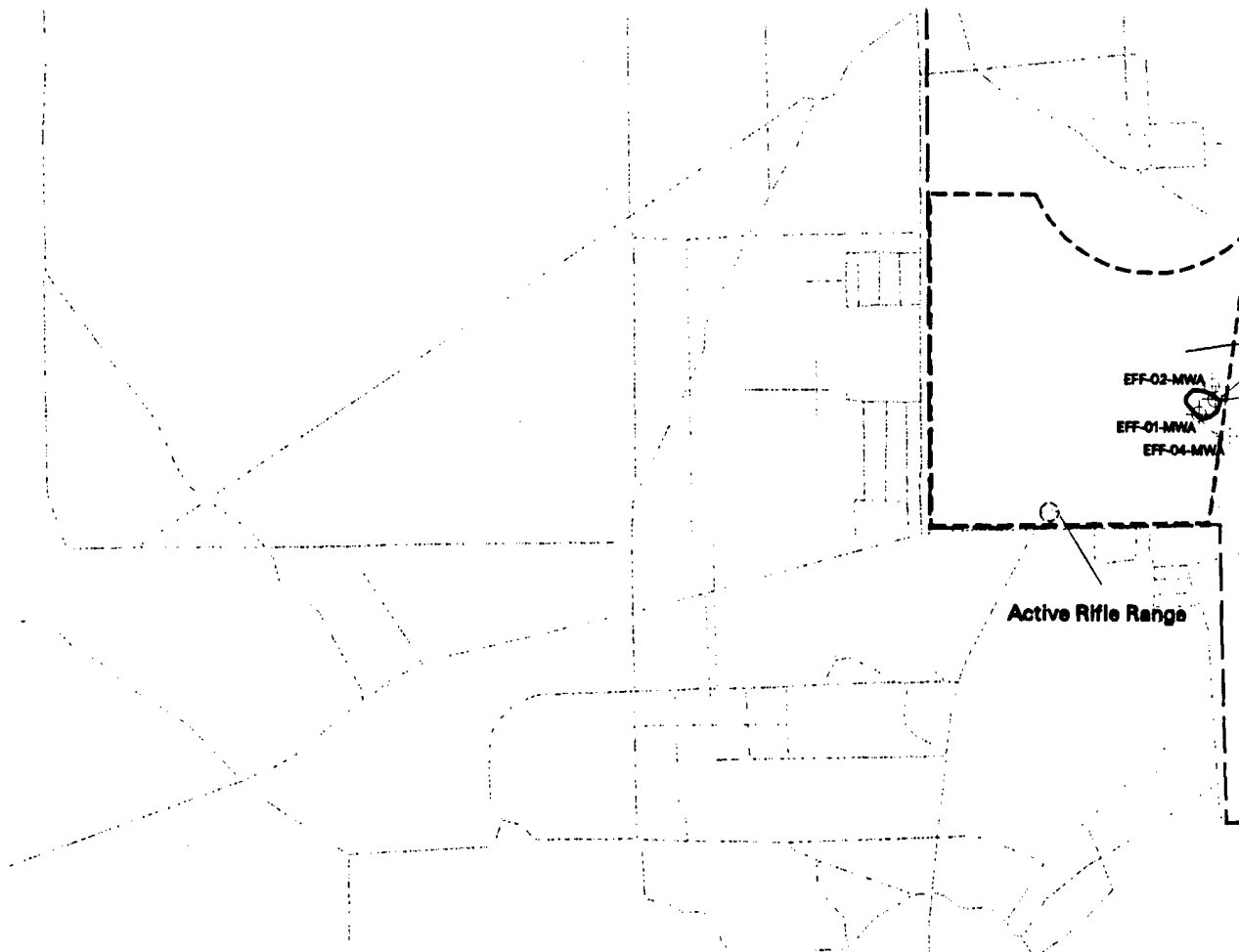


West Corner
Training Facility

State Honey Lake Boundary
on boundary per USGS topographic map
East Shoreline, and










(6)



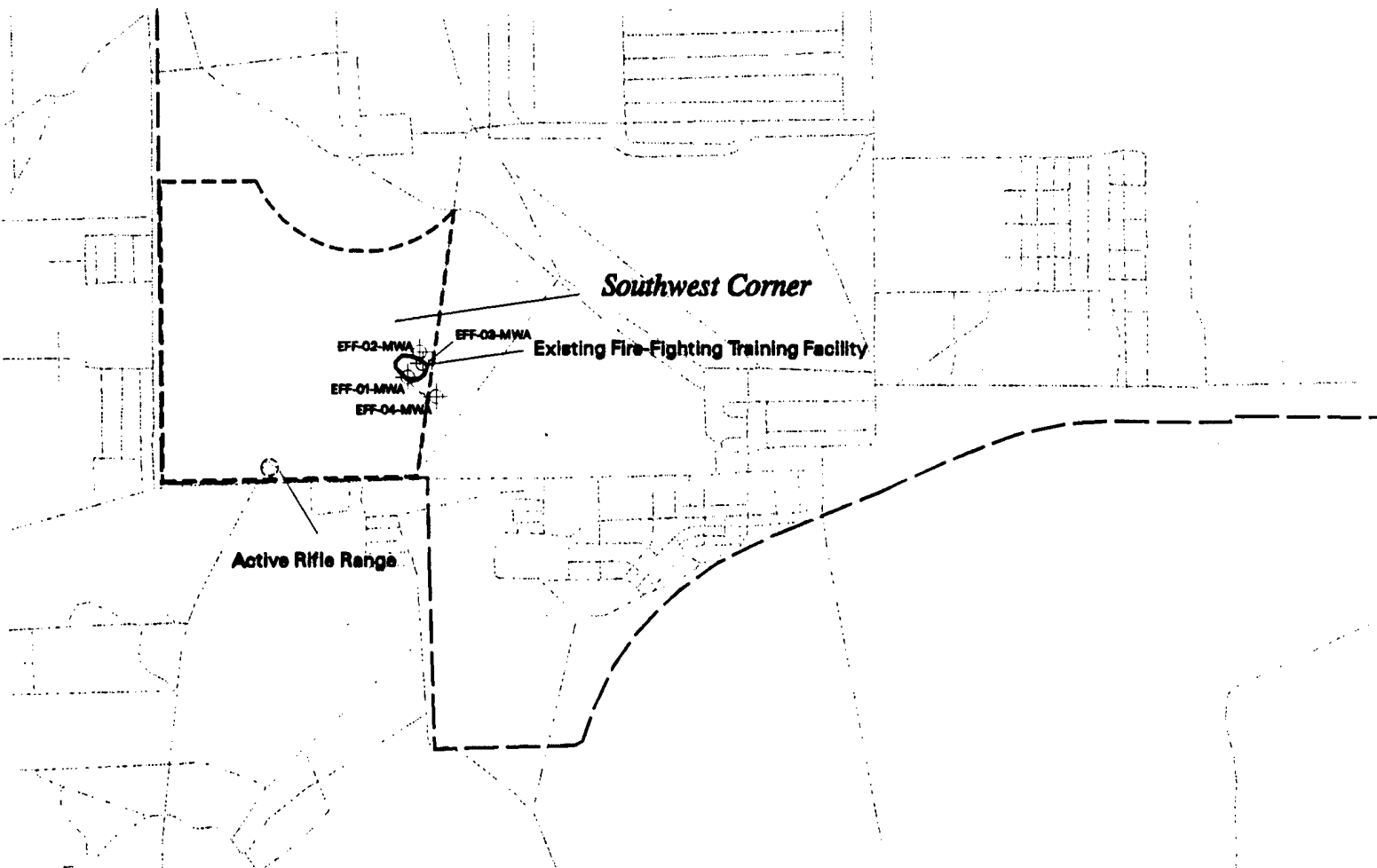
EXPLANATION

Department of Defense Environmental Condition (DoD, 1993)

-  Category 1: Areas where no storage, release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)
-  Category 2: Areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred)
-  Category 3: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require removal or remedial action
-  Category 4: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken
-  Category 5: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are under way, but all required remedial actions have not yet been taken
-  Category 6: Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented
-  Category 7: Areas that are unevaluated or require additional evaluation

7

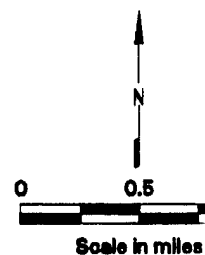
Note: Property boundaries indicated are approximate and are not intended to represent the legal description of the parcel(s)



EXPLANATION

- substances or petroleum in adjacent areas)
- roleum products has occurred
- d)
- hazardous substances or require removal or remedial action
- hazardous substances or to protect human health and the
- hazardous substances or under way, but all required remedial
- hazardous substances or not yet been implemented

- Approximate Honey Lake Boundary
- Installation boundary per USGS topographic map
- Airfield, East Shoreline, and Southwest Corner BRAC parcel boundaries
- Roads
- IRP Site
- ⊕ Monitoring Well



Source: Parcel, shoreline, and property boundaries from SIAD Environmental Management Division



Harding Lawson Associates
Engineering and
Environmental Services

CERFA
South V
East Sh
Sierra A
Lassen

DRAWN
SAS

JOB NUMBER
32100 11.05.00

APPROV

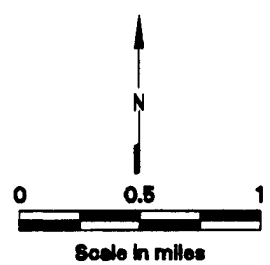
present the legal description of the parcel(s).

(B)

Southwest Corner

g Fire-Fighting Training Facility

Approximate Honey Lake Boundary
Installation boundary per USGS topographic map
Airfield, East Shoreline, and
Southwest Corner BRAC parcel boundaries
Roads
RP Site
Monitoring Well



**Source: Parcel, shoreline, and property boundaries from
SIAD Environmental Management Division**



**Harding Lawson Associates
Engineering and
Environmental Services**

**CERFA Map of
South West Corner, Airfield, and
East Shoreline Parcels
Sierra Army Depot
Lassen County, California**

PLATE

C-1

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED DATE
SAS	32100 11.05.00		11/25/96	2/14/97

9